WINTER TEMPERATURE STRUCTURE OF LAKE MICHIGAN

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Final Report on Research Supported by the

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TABLE OF CONTENTS

INTRODUCTION

This is the final report on Atmospheric Sciences Section, National Science Foundation Grant GA-524, a two-year research project designed to investigate the winter thermal budget of the Great Lakes (principally Lake Michigan), as a necessary sequel to a previous project supported by the Atmospheric Sciences Section of the National Science Foundation under NSF Grant GP-2411, titled "Growth of Ice on Lake Michigan." The final report of the previous project was published in 1966 as Special Report No. 26 of the Great Lakes Research Division of the University of Michigan (Heap and Noble 1966). The first annual report of this project was published as Special Report No. 32 of the Great Lakes Research Division (Noble and Ewing 1967). A related study of the summer temperature structure of Lake Michigan for 1963-66 was carried out under the cognizance of the current project, and was reported in Special Report No. 30 of the Great Lakes Research Division (Noble 1967).

Inasmuch as this is the final report for the research project, the previous results will be summarized, as necessary, for completeness. New data and analyses will be presented in detail. Readers may obtain copies of previous reports from the Great Lakes Research Division for full data reports published earlier.

Two graduate students have participated heavily in this project and have made significant contributions to the results of the program: Joseph C. Huang, who has done much of the computer programming and who is doing a related dissertation problem, and Karen J. Ewing, co-author of this report. Of the three undergraduate students working on the project, April Michaelis has made a most valuable contribution and has co-authored a related data report, Special Report No. 39 of the Great Lakes Research Division (Noble and Michaelis 1968).

ICE PREDICTION INDICES

The research program supported by this grant was designed to verify potential ice prediction techniques indicated by a previous study reported by Heap and Noble (1966).

Within constraints to be described in following sections of this report, and within verification conditions imposed by the somewhat limited ice cover observations for Lake Michigan, an operational ice prediction technique is promulgated for initial implementation by the U.S. Coast Guard, U.S. Weather Bureau, and the Lake Carriers Association. The operational method is initially designed for Lake Michigan, with the understanding that the basic methods may be subsequently applied to all of the Great Lakes as substantiating data are developed. It is suggested that the technique be extended to the remainder of the Great Lakes with the cognizance and cooperation of the Canadian Department of Transport.

Ice Potential Index

As indicated in the previous study, and as verified for a five-year period (Noble and Ewing 1967), the early-winter temperature structure of Lake Michigan may be used as an indicator of the ice-forming potential of Lake Michigan.

If the temperature of the mid-lake water mass (the deep portions of the southern basin of the lake) is of the order of 9°C for the first week of December, there is sufficient heat storage in the lake to reduce ice formation to a nearly insignificant amount (e.g. the winter season of 1963-64). If the temperature of the mid-lake water mass is of the order of 6°C for the first week of December, ice formation may approach 100% coverage of the lake basin (e.g. the winter season of 1962-63). These criteria were established from weekly averages calculated from U.S. Public Health Service Federal Water Pollution Control Administration buoy stations in Lake Michigan.

BT data from the USCGC WOODBINE, taken during her late November-early December run to recover aids to navigation in the southern basin of Lake Michigan, have served as a useful approximation to average thermograph data for an Ice Potential Index. Further, since the water column of the lake is nearly isothermal at this time of year, it has been demonstrated that accurately calibrated surface temperature measurements taken from the WOODBINE may be used as the Ice Prediction Index. (An accurate, calibrated, thermistor bridge was installed in the main sea chest of the WOODBINE in the fall of 1967.) Table 1 summarizes the Ice Potential Index data for the winter seasons 1962-63 through 1967-68.

The following technique is suggested for the determination of an annual Ice Prediction Index for Lake Michigan:

A calibration check should be run on the WOODBINE'S thermistor bridge during early November. During the fall cruise to recover aids to navigation (typically Grand Haven - Milwaukee - Chicago - Grand Haven during the last week of November and the first week of December), the WOODBINE should read

Table 1. Ice Potential Index data for winter seasons 1962-63 through 1967-68.

1962-63	Average water temperature 5.9°C, 2 December-9 December 1962, buoy station 18 (43°08'N, 57°24.5'W). Ice potential: Heavy. Ice cover: Record ice formation.
1963-64	Average water temperature 8.8°C, 2 December-9 December 1963, buoy station 18 (43°08'N, 57°24.5'W). Ice potential: Light. Ice cover: Very light ice formation.
1964-65	No water temperature measurements.
1965-66	WOODBINE BT's water temperature 7.3°C to 9.4°C, Southern Basin Lake Michigan, 3 December-9 December 1965. Ice potential: Light. Ice cover: Very light ice formation.
1966-67	WOODBINE BT's water temperature 4.2°C to 8.2°C, 3 December-9 December 1966, Southern Basin Lake Michigan. Ice potential: Moderate. Ice cover: Moderate to light.
1967-68	WOODBINE BT's and thermistor bridge 3.5°C to 5.3°C, 13 December-18 December 1967, Southern Basin Lake Michigan. Ice potential: Heavy. Ice cover: Early ice melted mid-winter. Later ice held to late in season.

surface water temperatures from her thermistor bridge (to the nearest 0.1°C) at each point of departure upon entering and leaving harbor entrances, and at each hour while away from the dock. Each day (say at 1000 hours, depending upon traffic) the WOODBINE should transmit a message to 9th District Coast Guard Headquarters giving the surface water temperature readings for the preceding 24 hours. The message would be coded in the following format:

LLLL 1111 ttt, LLLL 1111 ttt, ...

where LLLL is the latitude in whole degrees, minutes, and tenths of minutes (omitting the ten-degree digit 4)

where 1111 is the longitude in whole degrees, minutes and tenths of minutes (omitting the ten-degree digit 8)

where ttt is the water surface temperature to 0.1°C.

Upon receipt of the coded message at Coast Guard headquarters in Cleveland, the WOODBINE temperatures would be given a subjective analysis to derive the Ice Prediction Index. Subjective analysis is required to interpret the temperatures obtained around the southern basin of Lake Michigan in terms of a temperature representative of the deep-water mass of the lake. In other words, ship injection temperatures are used to approximate the weekly average, deep-water thermograph data obtained in 1962-63 and 1963-64. Equivalent deep-water temperatures (representative of the southern basin of the lake), between 6°C and 9°C for the first week in December, indicate a potential for the formation of an ice cover ranging from extremely heavy to very light, respectively.

It is strongly suggested that all of the Coast Guard cutters on the Great Lakes be provided with precision water intake temperature indicators similar to that installed on the WOODBINE, and that similar statistics be developed for Ice Potential Indices for all of the Great Lakes.

Freeze-up Date and Rate of Ice Formation

Verified statistics have not been developed, but a method similar to that of Richards (1964) has been indicated for the short-range (one week) prediction of the freeze-up date and the rate of ice formation of Lake Michigan. This technique is based on the analysis of daily air temperature data from Milwaukee. As will be developed in a following section of this report, the method is to compute the mean of the high and low temperature for each day, convert this mean to temperature expressed in degrees Celsius, and maintain a cumulative plot of the sum of the daily mean temperatures from 1 October of each year. Since the freezing point is 0°C, the cumulative plot represents degree-days of freezing (or thawing) exposure. The cumulative plots (Noble and Ewing 1967; Heap and Noble 1966) show a positive increase from 1 October until approximately 25 November, when a maximum is reached. The curve then goes negative from the last week in November, indicating the onset of freezing weather. The date of the maximum of the curve is a precursor of the freeze-up date, and the rate of decrease of the cumulative curve indicates the rate of ice formation. The curve begins to decrease as negative degree-days (freezing exposure) are algebraically added to the cumulative curve.

Inadequate ice observations over a sufficient period of record for Lake Michigan have prevented the establishment of empirical criteria for the definition of freeze-up dates or of the rate of ice formation. These data are currently being developed through systematic ice observations being carried out by the U.S. Lake Survey.

The Ice Prediction Index provides an estimate of the amount of ice to be expected in any given season. The cumulative Celsius degree-day plots provide an indication of the freeze-up date, and the rate of formation of ice to the predicted maximum.

The long-range warming or cooling trend of Lake Michigan may be estimated for four-year periods by the method of Ayers (1965).

A PRELIMINARY STUDY OF THE LAKE MICHIGAN HEAT BUDGET

Ayers (1965) suggested that annual averages of air temperatures, cloudy days, and storm passages over the Lake Michigan basin can be combined as moving 5-year means to predict warming and cooling trends of the water temperatures measured at the Chicago water intakes. These climatological calculations have been carried out from data available for the last century, and indicate the observed water temperature trends approximately five years in advance. Ayers' resultant predictor curve has been extended to 1965, and is reproduced in Figure 1. The predictor curve indicates that the lake should cool and remain at lower temperatures through approximately 1970. Table 1 showed a cooling trend from 1965 through 1967. It is anticipated that the lake will remain at low temperatures for another two years.

In order to study the heat storage in the lake basin, a computer program has been developed to analyze all BT data from the Great Lakes Research Division for monthly average water temperatures for 10-meter layers for each month for each one-degree latitude/longitude square in the Lake Michigan Basin. The data have been published for 1963-1966 by Noble (1967). The BT punch card format used by the Great Lakes Research Division, the analysis program, and the data for 1954, 55, 61, 62, and 1967 (all available data) are presented in Appendix B.

A second program has been developed that analyzes each individual BT cast, determines whether a thermocline exists, or whether the cast is isothermal, and defines the upper and lower limits of the boundary layer and the depth of maximum temperature gradient. The analysis program and the summary data giving the limits of the boundary layer and the depth of maximum gradient by month for each degree of latitude of Lake Michigan for 1954 through 1967 are presented in Appendix C.

Because of the lack of winter water temperature data (except for the 1962-63 and 1963-64 seasons) and because of the lack of complete ice reconnaissance data for the whole Lake Michigan basin, the winter heat transfer from the water mass of Lake Michigan must be estimated from fall lake temperatures, spring lake temperatures, and the sensible heat transfer into the air mass as it crosses the lake under the effect of the prevailing westerly winds. This estimate of heat transfer does not provide adequate data for heat budget calculations, but may be used to estimate trends in the heat storage in the lake. In order to measure the solar radiation available for lake heating during the winter, integrating solar radiometers were developed and tested in the Ann Arbor area during the winter of 1966-67, as described in the previous report. The integrating radiometers were modified slightly and placed at Coast Guard stations during the winter of 1967-68 at St. Joseph, Muskegon, and Manistee, Michigan; Two Rivers, and Milwaukee, Wisconsin; and Chicago, Illinois, to determine the daily integrals of solar radiation incident upon the whole lake basin. Unfortunately, due to component quality control problems and to the inexperience of the operators at some stations, not enough solar radiation data were obtained to be useful for a thermal study.

Daily air temperature records were examined for Milwaukee, Muskegon, Two Rivers, Manistee, Chicago, and Benton Harbor. The average between the daily high and low temperatures was calculated and converted to temperatures

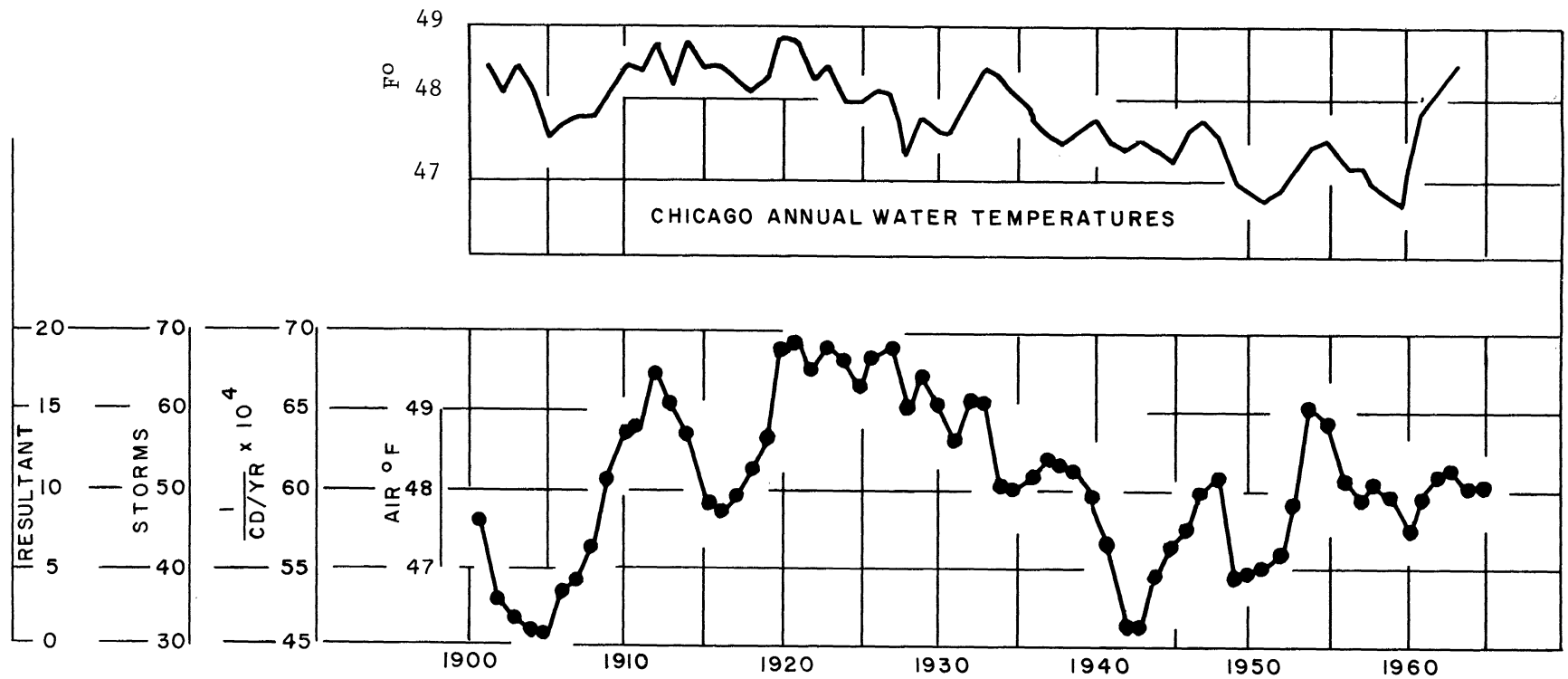

Fig. 1. Climatological predictor curve for Lake Michigan water temperature trends. After the method of Ayers (1965).

expressed in degrees Celsius. Since the freezing point is 0°C, negative values indicate freezing exposure, and positive values indicate thawing exposure. October 1 was arbitrarily defined as the beginning of the winter season, and the daily average temperatures were cumulatively summed. Since the average daily air temperature was above freezing during the month of October, the cumulative degree-day curve increases to a maximum that occurs at the onset of freezing weather. The negative degree-days that are indicative of freezing weather are subtracted from the previous cumulative total. The cumulative curve reaches a minimum and starts to increase again with the onset of warm spring weather in April. The date of the maximum of the cumulative degree-day curve indicated the onset of freezing weather, and therefore, of the freeze-up date. Figure 2 gives the cumulative degree-day curve for Milwaukee for the winter seasons of 1962-63 through 1967-68. The difference between the maximum and minimum values of the cumulative degree-day curve is a measure of the severity (freezing exposure) of the winter season. It is seen that the curve maximum occurs at dates varying from 25 November to 16 December, and that the curve minima occur between 2 March and 31 March. Freezing weather begins at the time of the curve maximum, and thawing weather at the time of the curve minimum. The dates of the maxima and minima of the curves are indicators of the freeze-up and break-up dates, respectively. Of course, accurate measurements of the solar radiation must be considered to obtain a precise prediction of the freeze-up and break-up dates.

Table 2 summarizes the cumulative degree-day data for three pairs of weather stations for the winter seasons of 1962-63 through 1963-64. The station pairs, Two Rivers - Manistee, Milwaukee - Muskegon, and Chicago - Benton Harbor were selected to be representative of the northern, middle, and southern portions of the lake basin. The dates and the cumulative degree-day values are given for each of the station records. The algebraic difference between the maximum and minimum values is the freezing exposure for each of the records. The Milwaukee records show that the severity of the winter seasons varied from 866 degree-days of freezing exposure in 1962-63 (the record ice year) to 439 during 1967-68. The very low freezing exposure during 1967-68 explains why, in spite of an ice potential index that indicated a possibility of extremely heavy ice cover, relatively little ice was formed as compared with the record year of 1962-63. On the other hand, the heavy ice potential index explains the persistence of the late-winter ice long into the spring of the year.

For the six stations considered, the winter freezing exposure ranged from 192 to 866 Celsius degree-days during the six winter seasons under study. The summer (7 April to 1 October) heating period showed approximately 3000 Celsius degree-days for all station records. The data for freezing exposure and heating (thawing) exposure are to be considered only as exposure indices, and cannot be construed as direct indicators of heat flux. For example, Table 3 gives the significant points for the cumulative degree-day curves from 6 April 1962 through 7 April 1968. The date points given are the beginning of the defined summer period, 7 April, the beginning of the defined winter period, 1 October, and the dates of the winter maxima and minima, approximately 10 December and 10 March, respectively. These data indicate a cumulative annual heating exposure of approximately 3000 Celsius degree-days.

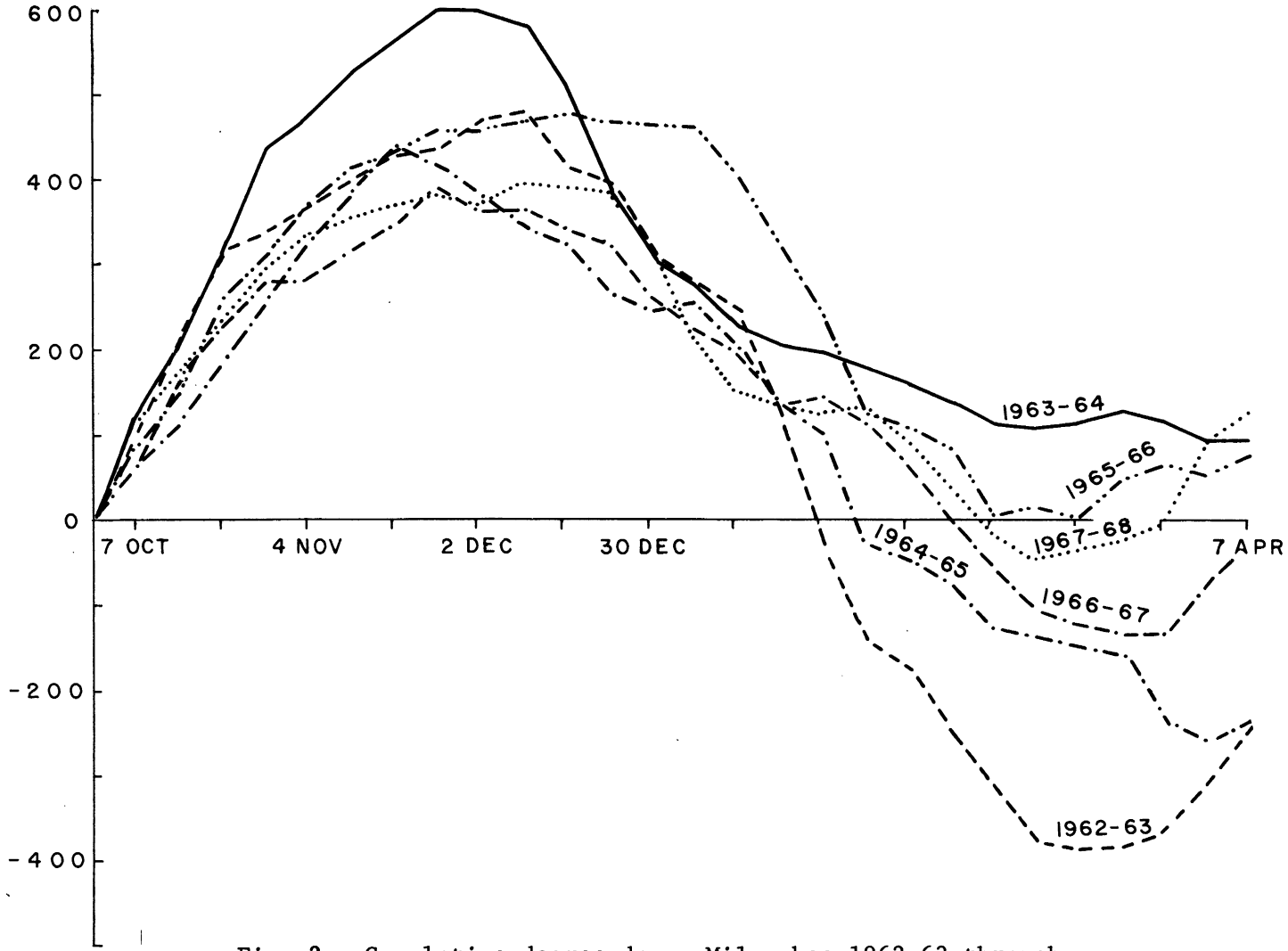

Fig. 2. Cumulative degree-days, Milwaukee 1962-63 through 1967-68.

Table 2. Summary of cumulative degree-day data and freezing exposure for six winter seasons 1962-63 through 1967-68.

TWO RIVERS - MANISTEE

	Two Rivers					Manistee				
	Max		Min		Freezing Exposure	Max		Min		Freezing Exposure
1962-1963	464	Dec 9	-376	Mar 24	840	521	Dec 9	-194	Mar 24	615
1963-1964	578	Nov 25	166	Mar 31	412	638	Dec 2	292	Mar 31	346
1964-1965	411	Nov 18	-256	Mar 31	667	512	Nov 18	67	Mar 31	445
1965-1966	428	Dec 16	- 24	Mar 10	452	497	Dec 16	191	Feb 24	306
1966-1967	355	Nov 25	-169	Mar 24	524	422	Nov 25	67	Mar 24	355
1967-1968	330	Nov 25	-195	Mar 2	525	423	Dec 23	- 4	Mar 16	427

MILWAUKEE - MUSKEGON

	Milwaukee					Muskegon				
	Max		Min		Freezing Exposure	Max		Min		Freezing Exposure
1962-1963	479	Dec 9	-387	Mar 10	866	514	Dec 9	-131	Mar 17	645
1963-1964	599	Nov 25	92	Mar 31	507	652	Dec 2	395	Feb 24	257
1964-1965	437	Nov 18	-259	Mar 31	696	455	Nov 25	115	Mar 31	340
1965-1966	478	Dec 16	6	Mar 10	472	512	Dec 16	171	Feb 24	341
1966-1967	389	Nov 25	-134	Mar 17	523	439	Dec 9	124	Mar 24	315
1967-1968	393	Dec 9	- 46	Dec 9	439	444	Dec 23	70	Mar 2	379

CHICAGO - BENTON HARBOR

	Chicago					Benton Harbor				
	Max		Min		Freezing Exposure	Max		Min		Freezing Exposure
1962-1963	680	Dec 9	121	Mar 24	559	597	Dec 9	41	Mar 3	556
1963-1964	803	Dec 2	524	Mar 3	279	714	Dec 9	522	Feb 24	192
1964-1965	612	Nov 18	268	Mar 31	344	569	Nov 18	314	Mar 31	255
1965-1966	707	Jan 6	419	Feb 24	288	726	Jan 6	519	Feb 24	207
1966-1967	521	Nov 25	206	Mar 10	315	378	Dec 9	108	Mar 10	270
1967-1968	498	Dec 23	178	Mar 2	320	499	Dec 23	204	Mar 2	295

Table 3. Cumulative Celsius degree-days, Milwaukee, Chicago, Two Rivers 1962-1968.

	Milwaukee		Chicago		Two Rivers	
1962	6 Apr.	0	6 Apr.	0	6 Apr.	0
	1 Oct.	2856	1 Oct.	3372	1 Oct.	2636
	9 Dec.	3335	9 Dec.	4052	9 Dec.	3100
1963	10 May	2469	24 Mar.	3493	24 Mar.	2260
	7 Apr.	2608	7 Apr.	3735	7 Apr.	2372
	1 Oct.	5441	1 Oct.	7216	1 Oct.	4984
	25 Nov.	6040	2 Dec.	8019	25 Nov.	5562
1964	31 May	5533	3 May	7740	31 Mar.	5150
	7 Apr.	5539	7 Apr.	7835	7 Apr.	5291
	1 Oct.	8617	1 Oct.	11260	1 Oct.	7995
	18 Nov.	9054	18 Nov.	11872	18 Nov.	8406
1965	31 Mar.	8358	31 Mar.	11528	31 Mar.	7739
	7 Apr.	8386	7 Apr.	11562	7 Apr.	7751
	1 Oct.	11240	1 Oct.	14726	1 Oct.	10276
	16 Dec.	11718			16 Dec.	10704
			1966 6 Jan.	15433		
1966	10 Mar.	11246	24 Feb.	15145	10 Mar.	10252
	7 Apr.	11316	7 Apr.	15287	7 Apr.	10307
	1 Oct.	14143	1 Oct.	18496	1 Oct.	12964
	25 Nov.	14532	25 Nov.	19017	25 Nov.	13319
1967	17 Mar.	14009	10 Mar.	18702	24 Mar.	12795
	7 Apr.	14117	7 Apr.	19373	7 Apr.	12878
	1 Oct.	16884	1 Oct.	22374	1 Oct.	15302
	9 Dec.	17277	23 Dec.	22872	25 Nov.	15632
1968	2 Mar.	16838	2 Mar.	22552	2 Mar.	15107
	7 Apr.	17011	7 Apr.	22796	7 Apr.	15189

The pattern of sensible heat transfer from the water mass to the atmosphere of the lake may be demonstrated by taking differences between the cumulative degree-day curves for cross-lake station pairs. Figure 3 gives the cross-lake difference for the northern pair of stations, Two Rivers and Manistee. Through the period of study, the apparent loss of heat to the atmosphere from the water mass as the air crosses the lake from Two Rivers to Manistee is equivalent to approximately 150 degree-days, between 1 October and 3 February as determined from air temperature measurements. This indication cannot be interpreted in terms of a heat flux until wind data are considered and the volume of warmed air mass is determined. After 3 February, the pattern of heat transfer becomes less distinct. The cross-lake warming of the air mass between Milwaukee and Muskegon is shown by the degree-day differences in Figure 4. For the winter seasons of 1962-63, 63-64, 64-65, and 66-67, the cross-lake increases were very similar (250 degree-days by 3 March), through a range of Milwaukee freezing exposures of 507 to 866 degree-days. For the two seasons of mild winters 1965-66 and 67-68 (with freezing exposures of 472 and 439 degree-days) the cross-lake warming was reduced to 150 cumulative degree-days over the same period. Figure 5, showing the cross-lake differences for Chicago and Benton Harbor, shows no regular pattern of cross-lake heat exchange. In this case, it is suggested that the data might be biased by the southern locations of the stations, inasmuch as southwesterly winds do not have representative over-water trajectories between Chicago and Benton Harbor.

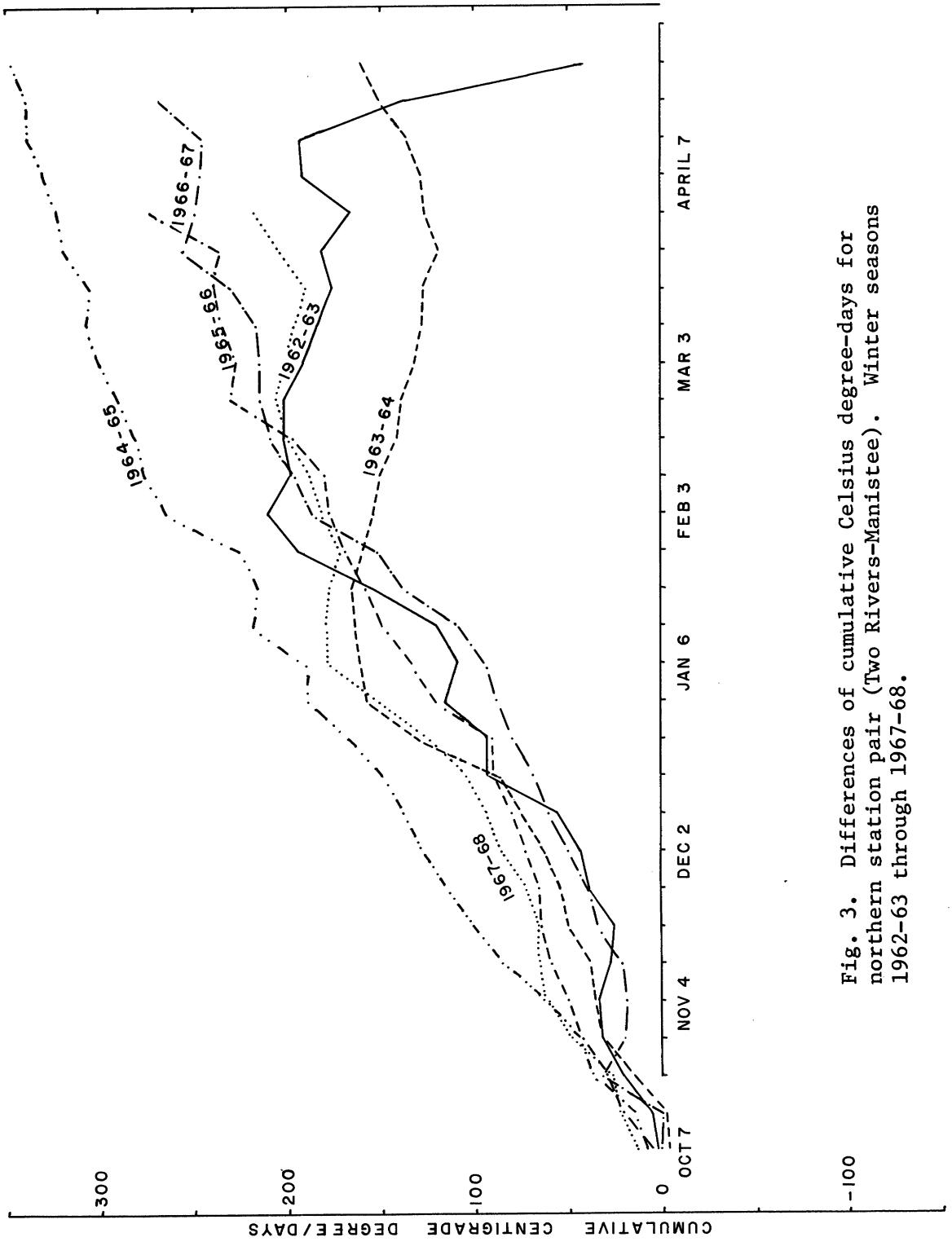

Fig. 3. Differences of cumulative Celsius degree-days for northern station pair (Two Rivers-Manistee). Winter seasons 1962-63 through 1967-68.

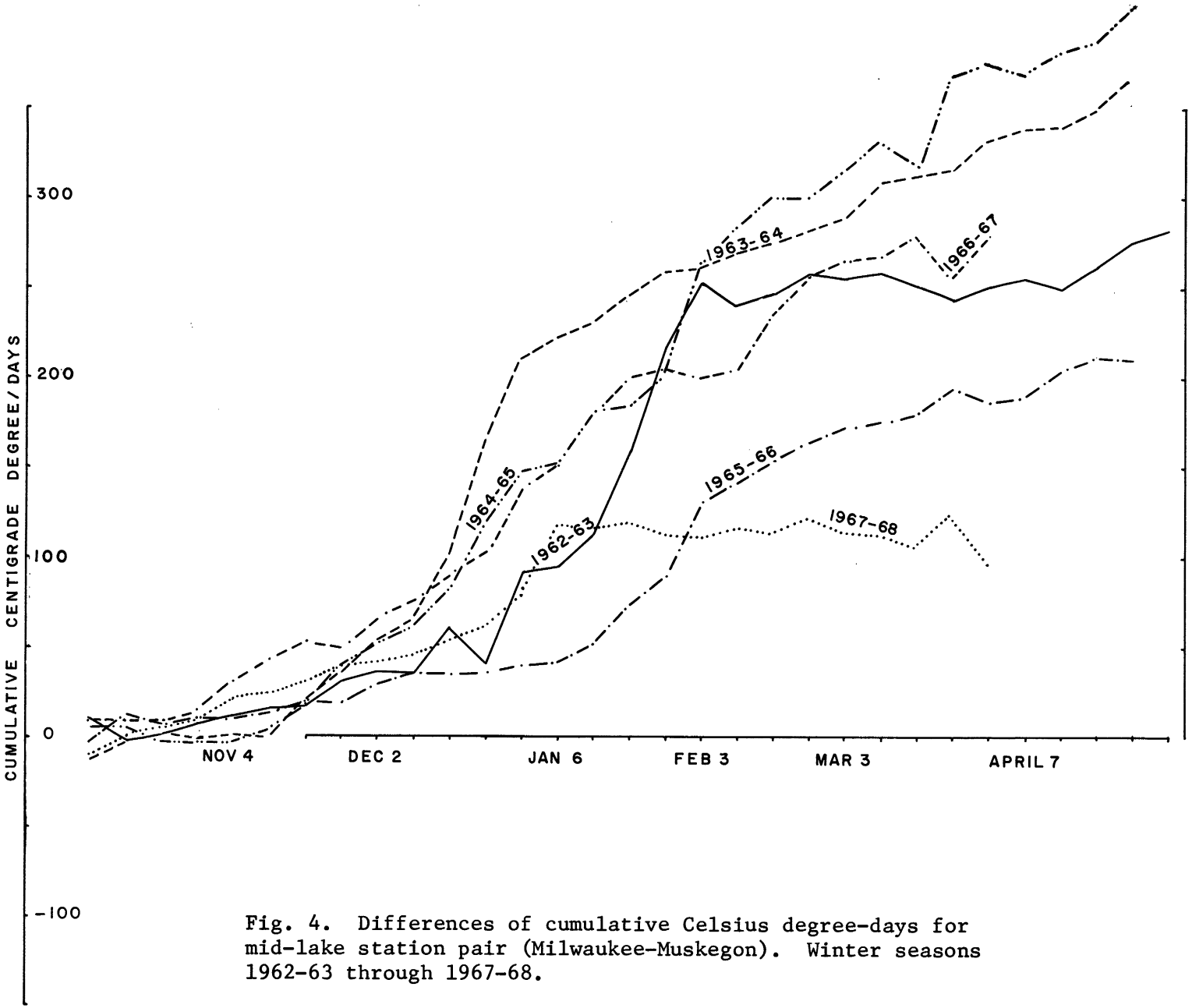

Fig. 4. Differences of cumulative Celsius degree-days for mid-lake station pair (Milwaukee-Muskegon). Winter seasons 1962-63 through 1967-68.

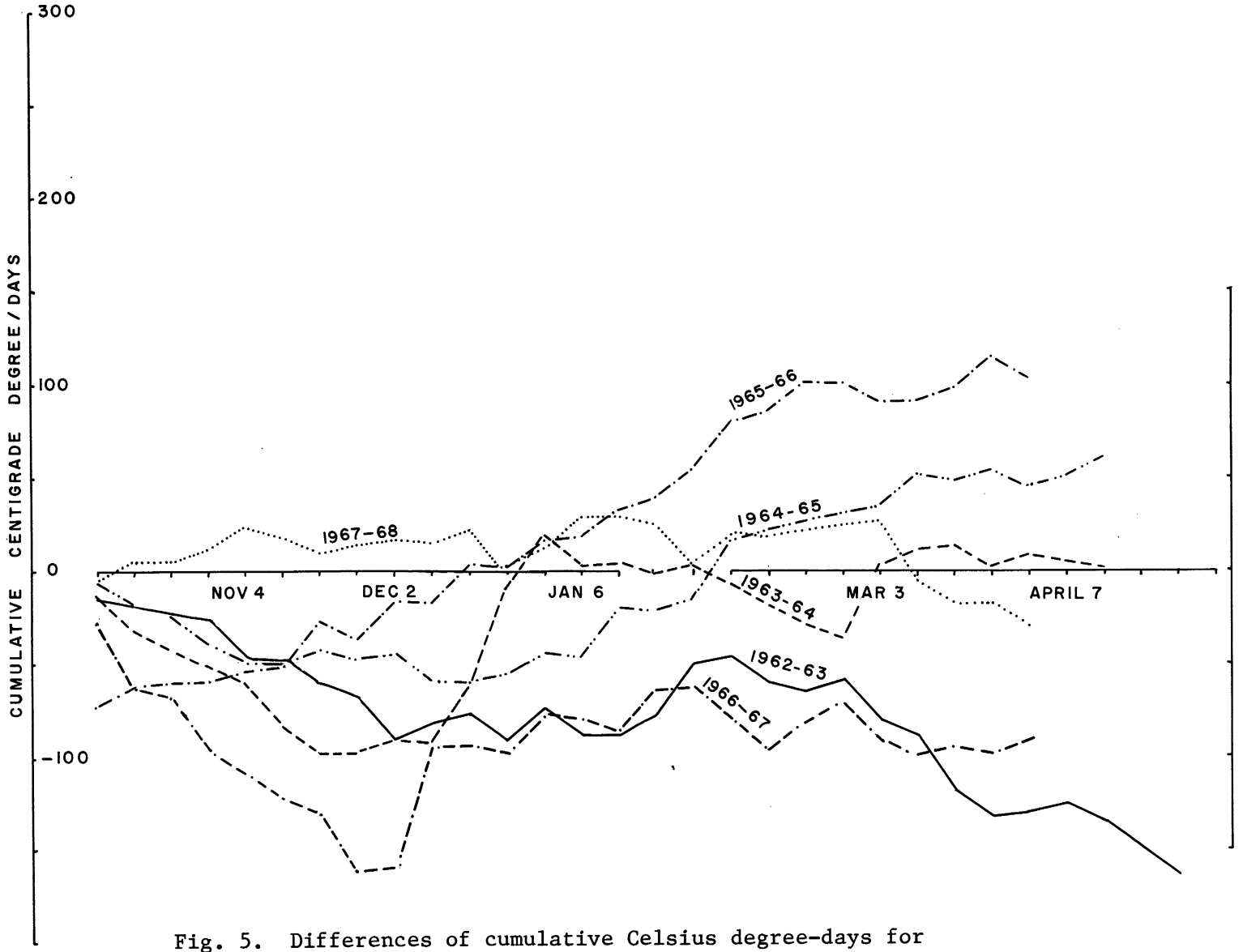

Fig. 5. Differences of cumulative Celsius degree-days for southern station pair (Chicago-Benton Harbor). Winter seasons 1962-63 through 1967-68.

RECOMMENDATIONS

The feasibility of using early-winter water temperature data as an ice potential index has been demonstrated. Following a method similar to that of Richards (1964), it has been shown that freezing exposure data may be developed to provide short-term predictions of freeze-up and break-up dates. Ayers' climatological calculations provide a potential means for indicating water temperature trends five years in advance. It is now possible to begin operational application of the above techniques, and to implement concentrated measurements programs to provide the necessary data for precise studies of the annual thermal budget of the lake.

As suggested in a previous section of this report, all Coast Guard cutters should be instrumented with precision thermistor bridges for the measurement of intake water temperatures. Water temperature measurements should be made hourly during the fall runs to recover the aids to navigation. Additional cruises should be scheduled every three weeks during the winter season to obtain representative deep-water temperatures from the lake.

Routine flights should be scheduled on a two-week basis for mapping of the total ice cover on the lake by both trained ice observers and using aerial photography as necessary. This program could be implemented by the Coast Guard in cooperation with the U.S. Lake Survey.

An operational program should be established for the collection and maintenance of a continuous record of ice cover, winter water temperature data, and freezing exposure data at Coast Guard or Weather Bureau headquarters in Cleveland. Appropriate atlases should be compiled and maintained for future refinement of the operational prediction techniques.

A cooperative program should be established between the Coast Guard, Weather Bureau and Lake Survey to establish solar radiation instrumentation at Coast Guard stations around the basin of the lake, to provide data necessary for accurate prediction of the break-up date.

Full support should be given to a research program in connection with the International Field Year Great Lakes to provide two full years of concentrated study of the thermal budget of a Great Lake (Lake Ontario). Two years of data will be necessary to accurately interpret the relationship between the lake temperature structure and the various energy exchanges with the air mass, radiant energy exchange, evaporation and precipitation, and ground-water and run-off heat exchanges. A minimum of two years of full data will be necessary to establish the dynamics of the thermal budget of the lake because of the heat storage in the water mass of the lake from season to season.

APPENDIX A: LAKE MORPHOLOGY

Winter temperature data have been reduced and analyzed from the U.S. Public Health Service/Federal Water Pollution Control Administration buoy stations established in Lake Michigan during the winter seasons of 1962-63 and 1963-64. The 90-minute temperature readings from each of the 96 thermograph records have been published as Special Report No. 39, Great Lakes Research Division (Noble and Michaelis 1968). The weekly average temperatures from these records have been published in the earlier report by Heap and Noble (1966). Recording thermographs were placed at 24 stations in the basin of Lake Michigan at depths of 10, 15, 22, 30, 60, 90, and each successive 30-meter level to the bottom of the lake. For completeness, and for future use in the computation of heat storage in the lake basin during the winter months, the volumes of successive depth-layers have been computed, using the standard thermograph station depths as centers for the depth layers. The depth-layers so selected were 0-45 ft, 45-67.5 ft, 67.5-87.5 ft, 87.5-150 ft, 250-350 ft, 350-450 ft, etc. The areas of the top and bottom surfaces of the depth layers were computed in terms of square miles, and the depths in feet. Accordingly the volume elements given in Table A, are expressed in units of [$mile^2$ ft].

Table A. Depth-layer volumes for Lake Michigan. Layer surfaces in units of square miles, depths in feet. Layer volumes expressed in units of [mile^2 ft].

Layer [ft]	Layer Volume L. Michigan including Green Bay & Traverse Bay, [mile^2 ft]	Layer Volume Green Bay [mile^2 ft]	Layer Volume Traverse Bay [mile^2 ft]
0-45	935,131.6	58,175.3	11,381.4
45-67.5	432,671.4	17,850.8	4,468.2
67.5-87.5	357,621.4	9,367.9	3,516.8
87.5-150	1,002,675.8	2,860.0	8,895.9
150-250	1,331,181.6		9,231.4
250-350	988,858.3		4,975.3
350-450	567,817.6		1,812.2
450-550	321,861.0		319.9
550-650	180,948.4		
650-750	101,870.6		
750-850	38,810.2		
850-950	1,694.5		

APPENDIX B: TEMPERATURE STRUCTURE OF LAKE MICHIGAN

The Great Lakes Research Division has adopted the following format for BT data cards:

```
BT4205987170 08JU630835 0620S5005B21 0001480051470071060080860100760150580210 52
BT4205987170 08JU630835 0620S5005B22 033048054046
```

These two cards are typical of those used for BT casts. The water temperature is read at the water surface, and at each depth where there is a discontinuity in the temperature curve. These two cards are coded "BT" to designate the data card type. The data are from latitude 42°05.9'N, 87°17.0'W, for 8 June 1963 at 0835 EST. The data are for BT cast number 0620 from the INLAND SEAS. The BT serial number is 5005B. Two data cards are needed to report the cast data, and the cards shown above are cards numbers 1 and 2 for the given cast, respectively. The first card shows a surface temperature reading of 14.8°C. The following data on the cards are coded as (ddd TTT), where ddd is the depth to the nearest whole meter, and TTT is the temperature to the nearest 0.1°C. The final reading on the second card shows a temperature of 4.6°C at 54 meters. The following program was developed to compute the average temperature for each 10-m layer of water depth for each one-degree square of latitude and longitude for each month of the year.

TEMPERATURE AVERAGES PROGRAM

```
      C     THIS IS A PROGRAM FOR TEMPERATURE AVERAGES OF EVERY 10 M. DEPTH
0001        INTEGER DEPTH,YR,SLNO,C,BAD,P(10),IX(30,12),BT/'BT'/,MONTH(12)/
           1'JA','FE','MA','AP','MY','JU','JL','AU','SP','OC','NO','DC'/
0002        REAL A(30,12),S(300),T(10),SM(30),TEMP(12)
0003    1   CALL REWIND(7)
0004        LSLN=0
0005        LCDNO=0
0006    2   READ(5,100,END=10) ID,LT,LN,MON,YR,SLNO,N,C,(P(I),T(I),I=1,7)
0007    100 FORMAT(T2,A2,T4,I2,T9,I2,T17,A2,T19,I2,T27,I3,T36,I1,I1,T39,7(I3,
           1F3.0))
0008        IF(ID.NE.BT) GO TO 2
0009        IF(N.LT.C.OR.(C.EQ.1.AND.SLNO.EQ.LSLN)) GO TO 3
0010        IF(C.GT.1.AND.SLNO.NE.LSLN) GO TO 3
0011        IF(C.NE.(LCDNO+1)) GO TO 3
0012        LCDNO=C
0013        GO TO 4
0014    3   WRITE(6,101)
0015    101 FORMAT('0',T20,'CARDS NOT IN ORDER')
0016        WRITE(6,103)SLNO,MON,YR,N,C
0017    103 FORMAT(T20,I3,5X,A2,5X,I2,5X,I1,5X,I1)
0018        CALL SYSTEM
0019    4   IF(C.EQ.N) LCDNO=0
0020        IF(N.GE.C) LSLN=SLNO
0021        WRITE(7,102) ID,LT,LN,MON,YR,SLNO,N,C,(P(I),T(I), I=1,7)
0022    102 FORMAT(T2,A2,I2,3X,I2,6X,A2,I2,6X,I3,6X,I1,I1,(T39,7(I3,F4.0)))
0023        GO TO 2
0024    10  CALL REWIND(7)
0025        DO 50 LON=85, 87
0026        DO 50 LAT=41, 45
0027        DO 11 K=1, 12
0028        DO 11 I=1, 30
0029        A(I,K)=0.0
0030        IX(I,K)=0
0031    11  CONTINUE
0032    9   DO 12 K=1, 300
0033        S(K)=0.0
0034    12  CONTINUE
0035    13  DO 14 K=1, 30
0036        SM(K)=0.0
0037    14  CONTINUE
0038        LDEP=1
0039        INK=0
0040    15  DO 16 K=1, 8
0041        P(K)=0
0042        T(K)=0.0
0043    16  CONTINUE
0044    18  READ(7,102,END=39) ID,LT,LN,MON,YR,SLNO,N,C,(P(I),T(I), I=1, 7)
0045        IF(LT.NE.LAT.OR.LN.NE.LON.OR.ID.NE.BT) GO TO 15
0046        DO 19 IM=1, 12
0047        IF(MON.EQ.MONTH(IM)) GO TO 20
0048    19  CONTINUE
0049    20  M=IM
0050        DO 21 L=1, 8
0051        IF(T(1).EQ.0.0) GO TO 15
0052        IF(T(L).EQ.0.0) GO TO 22
0053        IN=L
0054    21  CONTINUE
0055    22  DO 23 I=1, IN
0056        DEPTH=P(I)+1
0057        S(DEPTH)=T(I)
0058    23  CONTINUE
0059        K=LDEP
0060        IND=P(IN)+1
0061    24  KD=K
0062        DO 25 K=K, IND
0063        IF(K.EQ.KD.OR.K.LE.INK) GO TO 25
0064        IF(S(K).NE.0.0) GO TO 27
0065    25  CONTINUE
0066    27  Q=(S(KD)-S(K))/(K-KD)
0067        DO 29 J=KD, K
0068        JM=J-KD
0069        S(J)=S(KD)-(JM*Q)
0070    29  CONTINUE
0071        IF(K.EQ.IND) GO TO 31
0072        GO TO 24
0073    31  I=LDEP
0074        JND=IND-10
0075        DO 35 I=I, JND, 10
0076        J=(I+10)/10
0077        SM(J)=S(I)
0078        DO 33 K=1, 9
0079        SM(J)=S(I+K)+SM(J)
0080    33  CONTINUE
0081        A(J,M)=A(J,M)+SM(J)/10.
0082        IX(J,M)=IX(J,M)+1
0083    35  CONTINUE
0084        IF(N-C) 36, 36, 37
0085    36  GO TO 9
0086    37  LDEP=(IND/10)*10+1
0087        INK=IND
0088        GO TO 15
0089    39  CALL REWIND(7)
0090        WRITE(6,105)
0091    105 FORMAT('1',T25, 'AVERAGE TEMPERATURE BY 10 M. LAYER')
0092        WRITE(6,106) LAT, LON,YR
0093    106 FORMAT('0',T23, 'LATITUDE=',T33,I2,T36, 'N    LONGTITUDE=',T52,I2,
           1T55, 'W   19',T61,I2)
0094        WRITE(6,107)
0095    107 FORMAT('0',T7, 'INTERVAL    JAN     FEB     MAR     APR     MAY     JU
           1N     JUL     AUG     SEP     OCT     NOV     DEC')
0096        DO 45 I=1, 300, 10
0097        DO 43 J=1, 12, 1
0098        DEPTH=I-1
0099        LDEP=DEPTH+9
0100        IF(IX((I+10)/10,J).EQ.0) GO TO 42
0101        TEMP(J)=A((I+10)/10,J)/(10*IX((I+10)/10,J))
0102        GO TO 43
0103    42  TEMP(J)=0.0
0104    43  CONTINUE
0105        IF(I.EQ.1.OR.I.EQ.101.OR.I.EQ.201) GO TO 44
0106        WRITE(6,108) DEPTH,LDEP,(TEMP(J), J=1, 12)
0107    108 FORMAT(' ',T6,I3,T10,'_',T12,I3,T18,12(F4.1,3X))
0108        GO TO 45
0109    44  WRITE(6, 109) DEPTH, LDEP,(TEMP(J),J=1,12)
0110    109 FORMAT('0',T6,I3,T10,'_',T12,I3,T18,12(F4.1,3X))
0111    45  CONTINUE
0112        WRITE(6,110)
0113    110 FORMAT('1',T25,'NUMBER OF BT'S USED TO COMPUTE AVER. TEMPERATURE')
0114        WRITE(6,111) LAT, LON,YR
0115    111 FORMAT('0',T28,'LATITUDE=',T38,I2,T41, 'N    LONGTITUDE=',T57,I2,
           1T60, 'W   19',T66,I2)
0116        WRITE(6,107)
0117        DO 49 I=1, 300, 10
0118        DEPTH=I-1
0119        LDEP=DEPTH+9
0120        IF(I.EQ.1.OR.I.EQ.101.OR.I.EQ.201) GO TO 47
0121        WRITE(6,113) DEPTH, LDEP, (IX((I+10)/10,J), J=1, 12)
0122    113 FORMAT(' ',T6,I3,T10,'_',T12,I3,T18,12(I4,3X))
0123        GO TO 49
0124    114 FORMAT('0',T6,I3,T10,'_',T12,I3,T18,12(I4,3X))
0125    47  WRITE(6,114) DEPTH, LDEP, (IX((I+10)/10,J), J=1, 12)
0126    49  CONTINUE
0127    50  CONTINUE
0128        END
```

Table B-1

AVERAGE TEMPERATURE BY 10 M. LAYER

LATITUDE= 45 N LONGTITUDE=85 W 1954

INTERVAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 _ 9	0.0	0.0	0.0	0.0	0.0	0.0	21.5	0.0	0.0	0.0	0.0	0.0
10 _ 19	0.0	0.0	0.0	0.0	0.0	0.0	17.5	0.0	0.0	0.0	0.0	0.0
20 _ 29	0.0	0.0	0.0	0.0	0.0	0.0	8.4	0.0	0.0	0.0	0.0	0.0
30 _ 39	0.0	0.0	0.0	0.0	0.0	0.0	6.1	0.0	0.0	0.0	0.0	0.0
40 _ 49	0.0	0.0	0.0	0.0	0.0	0.0	5.6	0.0	0.0	0.0	0.0	0.0
50 _ 59	0.0	0.0	0.0	0.0	0.0	0.0	5.4	0.0	0.0	0.0	0.0	0.0
60 _ 69	0.0	0.0	0.0	0.0	0.0	0.0	5.1	0.0	0.0	0.0	0.0	0.0
70 _ 79	0.0	0.0	0.0	0.0	0.0	0.0	4.9	0.0	0.0	0.0	0.0	0.0
80 _ 89	0.0	0.0	0.0	0.0	0.0	0.0	4.8	0.0	0.0	0.0	0.0	0.0
90 _ 99	0.0	0.0	0.0	0.0	0.0	0.0	4.7	0.0	0.0	0.0	0.0	0.0
100 _ 109	0.0	0.0	0.0	0.0	0.0	0.0	4.6	0.0	0.0	0.0	0.0	0.0
110 _ 119	0.0	0.0	0.0	0.0	0.0	0.0	4.5	0.0	0.0	0.0	0.0	0.0
120 _ 129	0.0	0.0	0.0	0.0	0.0	0.0	4.4	0.0	0.0	0.0	0.0	0.0
130 _ 139	0.0	0.0	0.0	0.0	0.0	0.0	4.3	0.0	0.0	0.0	0.0	0.0
140 _ 149	0.0	0.0	0.0	0.0	0.0	0.0	4.3	0.0	0.0	0.0	0.0	0.0
150 _ 159	0.0	0.0	0.0	0.0	0.0	0.0	4.2	0.0	0.0	0.0	0.0	0.0
160 _ 169	0.0	0.0	0.0	0.0	0.0	0.0	4.1	0.0	0.0	0.0	0.0	0.0
170 _ 179	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180 _ 189	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
190 _ 199	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

NUMBER OF BT"S USED TO COMPUTE AVER. TEMPERATURE

LATITUDE= 45 N LONGTITUDE=85 W 1954

INTERVAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 _ 9	0	0	0	0	0	0	7	0	0	0	0	0
10 _ 19	0	0	0	0	0	0	5	0	0	0	0	0
20 _ 29	0	0	0	0	0	0	5	0	0	0	0	0
30 _ 39	0	0	0	0	0	0	4	0	0	0	0	0
40 _ 49	0	0	0	0	0	0	4	0	0	0	0	0
50 _ 59	0	0	0	0	0	0	3	0	0	0	0	0
60 _ 69	0	0	0	0	0	0	1	0	0	0	0	0
70 _ 79	0	0	0	0	0	0	1	0	0	0	0	0
80 _ 89	0	0	0	0	0	0	1	0	0	0	0	0
90 _ 99	0	0	0	0	0	0	1	0	0	0	0	0
100 _ 109	0	0	0	0	0	0	1	0	0	0	0	0
110 _ 119	0	0	0	0	0	0	1	0	0	0	0	0
120 _ 129	0	0	0	0	0	0	1	0	0	0	0	0
130 _ 139	0	0	0	0	0	0	1	0	0	0	0	0
140 _ 149	0	0	0	0	0	0	1	0	0	0	0	0
150 _ 159	0	0	0	0	0	0	1	0	0	0	0	0
160 _ 169	0	0	0	0	0	0	1	0	0	0	0	0
170 _ 179	0	0	0	0	0	0	0	0	0	0	0	0
180 _ 189	0	0	0	0	0	0	0	0	0	0	0	0
190 _ 199	0	0	0	0	0	0	0	0	0	0	0	0

AVERAGE TEMPERATURE BY 10 M. LAYER

LATITUDE= 41 N LONGTITUDE=86 W 1954

INTERVAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 _ 9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10 _ 19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20 _ 29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30 _ 39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40 _ 49	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50 _ 59	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
60 _ 69	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70 _ 79	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80 _ 89	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90 _ 99	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

NUMBER OF BT"S USED TO COMPUTE AVER. TEMPERATURE

LATITUDE= 41 N LONGTITUDE=86 W 1954

INTERVAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 _ 9	0	0	0	0	0	0	0	0	0	0	0	0
10 _ 19	0	0	0	0	0	0	0	0	0	0	0	0
20 _ 29	0	0	0	0	0	0	0	0	0	0	0	0
30 _ 39	0	0	0	0	0	0	0	0	0	0	0	0
40 _ 49	0	0	0	0	0	0	0	0	0	0	0	0
50 _ 59	0	0	0	0	0	0	0	0	0	0	0	0
60 _ 69	0	0	0	0	0	0	0	0	0	0	0	0
70 _ 79	0	0	0	0	0	0	0	0	0	0	0	0
80 _ 89	0	0	0	0	0	0	0	0	0	0	0	0
90 _ 99	0	0	0	0	0	0	0	0	0	0	0	0

AVERAGE TEMPERATURE BY 10 M. LAYER

LATITUDE= 42 N LONGTITUDE=86 W 1954

INTERVAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 _ 9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10 _ 19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20 _ 29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30 _ 39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40 _ 49	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50 _ 59	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
60 _ 69	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70 _ 79	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80 _ 89	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90 _ 99	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

NUMBER OF BT"S USED TO COMPUTE AVER. TEMPERATURE

LATITUDE= 42 N LONGTITUDE=86 W 1954

INTERVAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 _ 9	0	0	0	0	0	0	0	0	0	0	0	0
10 _ 19	0	0	0	0	0	0	0	0	0	0	0	0
20 _ 29	0	0	0	0	0	0	0	0	0	0	0	0
30 _ 39	0	0	0	0	0	0	0	0	0	0	0	0
40 _ 49	0	0	0	0	0	0	0	0	0	0	0	0
50 _ 59	0	0	0	0	0	0	0	0	0	0	0	0
60 _ 69	0	0	0	0	0	0	0	0	0	0	0	0
70 _ 79	0	0	0	0	0	0	0	0	0	0	0	0
80 _ 89	0	0	0	0	0	0	0	0	0	0	0	0
90 _ 99	0	0	0	0	0	0	0	0	0	0	0	0

Table B-1 (Continued)

AVERAGE TEMPERATURE BY 10 M. LAYER

LATITUDE= 43 N LONGTITUDE=86 W 1954

INTERVAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 _ 9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10 _ 19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20 _ 29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30 _ 39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40 _ 49	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50 _ 59	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
60 _ 69	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70 _ 79	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80 _ 89	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90 _ 99	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

NUMBER OF BT"S USED TO COMPUTE AVER. TEMPERATURE

LATITUDE= 43 N LONGTITUDE=86 W 1954

INTERVAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 _ 9	0	0	0	0	0	0	0	0	0	0	0	0
10 _ 19	0	0	0	0	0	0	0	0	0	0	0	0
20 _ 29	0	0	0	0	0	0	0	0	0	0	0	0
30 _ 39	0	0	0	0	0	0	0	0	0	0	0	0
40 _ 49	0	0	0	0	0	0	0	0	0	0	0	0
50 _ 59	0	0	0	0	0	0	0	0	0	0	0	0
60 _ 69	0	0	0	0	0	0	0	0	0	0	0	0
70 _ 79	0	0	0	0	0	0	0	0	0	0	0	0
80 _ 89	0	0	0	0	0	0	0	0	0	0	0	0
90 _ 99	0	0	0	0	0	0	0	0	0	0	0	0

AVERAGE TEMPERATURE BY 10 M. LAYER

LATITUDE= 44 N LONGTITUDE=86 W 1954

INTERVAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 _ 9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10 _ 19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20 _ 29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30 _ 39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40 _ 49	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50 _ 59	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
60 _ 69	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70 _ 79	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80 _ 89	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90 _ 99	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

NUMBER OF BT"S USED TO COMPUTE AVER. TEMPERATURE

LATITUDE= 44 N LONGTITUDE=86 W 1954

INTERVAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 _ 9	0	0	0	0	0	0	0	0	0	0	0	0
10 _ 19	0	0	0	0	0	0	0	0	0	0	0	0
20 _ 29	0	0	0	0	0	0	0	0	0	0	0	0
30 _ 39	0	0	0	0	0	0	0	0	0	0	0	0
40 _ 49	0	0	0	0	0	0	0	0	0	0	0	0
50 _ 59	0	0	0	0	0	0	0	0	0	0	0	0
60 _ 69	0	0	0	0	0	0	0	0	0	0	0	0
70 _ 79	0	0	0	0	0	0	0	0	0	0	0	0
80 _ 89	0	0	0	0	0	0	0	0	0	0	0	0
90 _ 99	0	0	0	0	0	0	0	0	0	0	0	0

AVERAGE TEMPERATURE BY 10 M. LAYER

LATITUDE= 45 N LONGTITUDE=86 W 1954

INTERVAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 _ 9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10 _ 19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20 _ 29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30 _ 39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40 _ 49	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50 _ 59	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
60 _ 69	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70 _ 79	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80 _ 89	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90 _ 99	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

NUMBER OF BT"S USED TO COMPUTE AVER. TEMPERATURE

LATITUDE= 45 N LONGTITUDE=86 W 1954

INTERVAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 _ 9	0	0	0	0	0	0	0	0	0	0	0	0
10 _ 19	0	0	0	0	0	0	0	0	0	0	0	0
20 _ 29	0	0	0	0	0	0	0	0	0	0	0	0
30 _ 39	0	0	0	0	0	0	0	0	0	0	0	0
40 _ 49	0	0	0	0	0	0	0	0	0	0	0	0
50 _ 59	0	0	0	0	0	0	0	0	0	0	0	0
60 _ 69	0	0	0	0	0	0	0	0	0	0	0	0
70 _ 79	0	0	0	0	0	0	0	0	0	0	0	0
80 _ 89	0	0	0	0	0	0	0	0	0	0	0	0
90 _ 99	0	0	0	0	0	0	0	0	0	0	0	0

NUMBER OF BT"S USED TO COMPUTE AVER. TEMPERATURE

LATITUDE= 41 N LONGTITUDE=87 W 1954

INTERVAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 _ 9	0	0	0	0	0	0	0	0	0	2	0	0
10 _ 19	0	0	0	0	0	0	0	0	0	2	0	0
20 _ 29	0	0	0	0	0	0	0	0	0	2	0	0
30 _ 39	0	0	0	0	0	0	0	0	0	2	0	0
40 _ 49	0	0	0	0	0	0	0	0	0	2	0	0
50 _ 59	0	0	0	0	0	0	0	0	0	2	0	0
60 _ 69	0	0	0	0	0	0	0	0	0	0	0	0
70 _ 79	0	0	0	0	0	0	0	0	0	0	0	0
80 _ 89	0	0	0	0	0	0	0	0	0	0	0	0
90 _ 99	0	0	0	0	0	0	0	0	0	0	0	0

AVERAGE TEMPERATURE BY 10 M. LAYER

LATITUDE= 41 N LONGTITUDE=87 W 1954

INTERVAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 _ 9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17.0	0.0	0.0
10 _ 19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.9	0.0	0.0
20 _ 29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.5	0.0	0.0
30 _ 39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.5	0.0	0.0
40 _ 49	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0	0.0	0.0
50 _ 59	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.7	0.0	0.0
60 _ 69	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70 _ 79	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80 _ 89	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90 _ 99	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table B-1 (Concluded)

AVERAGE TEMPERATURE BY 10 M. LAYER

LATITUDE= 42 N LONGTITUDE=87 W 1954

INTERVAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 _ 9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10 _ 19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20 _ 29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30 _ 39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40 _ 49	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50 _ 59	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
60 _ 69	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70 _ 79	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80 _ 89	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90 _ 99	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

NUMBER OF BT=S USED TO COMPUTE AVER. TEMPERATURE

LATITUDE= 42 N LONGTITUDE=87 W 1954

INTERVAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 _ 9	0	0	0	0	0	0	0	0	0	0	0	0
10 _ 19	0	0	0	0	0	0	0	0	0	0	0	0
20 _ 29	0	0	0	0	0	0	0	0	0	0	0	0
30 _ 39	0	0	0	0	0	0	0	0	0	0	0	0
40 _ 49	0	0	0	0	0	0	0	0	0	0	0	0
50 _ 59	0	0	0	0	0	0	0	0	0	0	0	0
60 _ 69	0	0	0	0	0	0	0	0	0	0	0	0
70 _ 79	0	0	0	0	0	0	0	0	0	0	0	0
80 _ 89	0	0	0	0	0	0	0	0	0	0	0	0
90 _ 99	0	0	0	0	0	0	0	0	0	0	0	0

AVERAGE TEMPERATURE BY 10 M. LAYER

LATITUDE= 43 N LONGTITUDE=87 W 1954

INTERVAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 _ 9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10 _ 19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20 _ 29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30 _ 39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40 _ 49	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50 _ 59	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
60 _ 69	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70 _ 79	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80 _ 89	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90 _ 99	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

NUMBER OF BT=S USED TO COMPUTE AVER. TEMPERATURE

LATITUDE= 43 N LONGTITUDE=87 W 1954

INTERVAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 _ 9	0	0	0	0	0	0	0	0	0	0	0	0
10 _ 19	0	0	0	0	0	0	0	0	0	0	0	0
20 _ 29	0	0	0	0	0	0	0	0	0	0	0	0
30 _ 39	0	0	0	0	0	0	0	0	0	0	0	0
40 _ 49	0	0	0	0	0	0	0	0	0	0	0	0
50 _ 59	0	0	0	0	0	0	0	0	0	0	0	0
60 _ 69	0	0	0	0	0	0	0	0	0	0	0	0
70 _ 79	0	0	0	0	0	0	0	0	0	0	0	0
80 _ 89	0	0	0	0	0	0	0	0	0	0	0	0
90 _ 99	0	0	0	0	0	0	0	0	0	0	0	0

AVERAGE TEMPERATURE BY 10 M. LAYER

LATITUDE= 44 N LONGTITUDE=87 W 1954

INTERVAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 _ 9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10 _ 19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20 _ 29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30 _ 39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40 _ 49	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50 _ 59	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
60 _ 69	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70 _ 79	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80 _ 89	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90 _ 99	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

NUMBER OF BT=S USED TO COMPUTE AVER. TEMPERATURE

LATITUDE= 44 N LONGTITUDE=87 W 1954

INTERVAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 _ 9	0	0	0	0	0	0	0	0	0	0	0	0
10 _ 19	0	0	0	0	0	0	0	0	0	0	0	0
20 _ 29	0	0	0	0	0	0	0	0	0	0	0	0
30 _ 39	0	0	0	0	0	0	0	0	0	0	0	0
40 _ 49	0	0	0	0	0	0	0	0	0	0	0	0
50 _ 59	0	0	0	0	0	0	0	0	0	0	0	0
60 _ 69	0	0	0	0	0	0	0	0	0	0	0	0
70 _ 79	0	0	0	0	0	0	0	0	0	0	0	0
80 _ 89	0	0	0	0	0	0	0	0	0	0	0	0
90 _ 99	0	0	0	0	0	0	0	0	0	0	0	0

AVERAGE TEMPERATURE BY 10 M. LAYER

LATITUDE= 45 N LONGTITUDE=87 W 1954

INTERVAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 _ 9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10 _ 19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20 _ 29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30 _ 39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40 _ 49	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50 _ 59	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
60 _ 69	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70 _ 79	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80 _ 89	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90 _ 99	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

NUMBER OF BT=S USED TO COMPUTE AVER. TEMPERATURE

LATITUDE= 45 N LONGTITUDE=87 W 1954

INTERVAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 _ 9	0	0	0	0	0	0	0	0	0	0	0	0
10 _ 19	0	0	0	0	0	0	0	0	0	0	0	0
20 _ 29	0	0	0	0	0	0	0	0	0	0	0	0
30 _ 39	0	0	0	0	0	0	0	0	0	0	0	0
40 _ 49	0	0	0	0	0	0	0	0	0	0	0	0
50 _ 59	0	0	0	0	0	0	0	0	0	0	0	0
60 _ 69	0	0	0	0	0	0	0	0	0	0	0	0
70 _ 79	0	0	0	0	0	0	0	0	0	0	0	0
80 _ 89	0	0	0	0	0	0	0	0	0	0	0	0
90 _ 99	0	0	0	0	0	0	0	0	0	0	0	0

Table B-2

AVERAGE TEMPERATURE BY 10 M. LAYER

LATITUDE= 45 N LONGTITUDE=85 W 1955

INTERVAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 _ 9	0.0	0.0	0.0	0.0	0.0	14.4	0.0	18.6	0.0	0.0	0.0	0.0
10 _ 19	0.0	0.0	0.0	0.0	0.0	10.8	0.0	16.4	0.0	0.0	0.0	0.0
20 _ 29	0.0	0.0	0.0	0.0	0.0	7.2	0.0	8.1	0.0	0.0	0.0	0.0
30 _ 39	0.0	0.0	0.0	0.0	0.0	5.3	0.0	5.6	0.0	0.0	0.0	0.0
40 _ 49	0.0	0.0	0.0	0.0	0.0	5.2	0.0	5.0	0.0	0.0	0.0	0.0
50 _ 59	0.0	0.0	0.0	0.0	0.0	5.0	0.0	4.7	0.0	0.0	0.0	0.0
60 _ 69	0.0	0.0	0.0	0.0	0.0	4.7	0.0	4.5	0.0	0.0	0.0	0.0
70 _ 79	0.0	0.0	0.0	0.0	0.0	4.6	0.0	4.4	0.0	0.0	0.0	0.0
80 _ 89	0.0	0.0	0.0	0.0	0.0	4.2	0.0	4.2	0.0	0.0	0.0	0.0
90 _ 99	0.0	0.0	0.0	0.0	0.0	4.1	0.0	4.1	0.0	0.0	0.0	0.0
100 _ 109	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.9	0.0	0.0	0.0	0.0
110 _ 119	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120 _ 129	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130 _ 139	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140 _ 149	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150 _ 159	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160 _ 169	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170 _ 179	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180 _ 189	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
190 _ 199	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

NUMBER OF BT"S USED TO COMPUTE AVER. TEMPERATURE

LATITUDE= 45 N LONGTITUDE=85 W 1955

INTERVAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 _ 9	0	0	0	0	0	19	0	24	0	0	0	0
10 _ 19	0	0	0	0	0	15	0	18	0	0	0	0
20 _ 29	0	0	0	0	0	13	0	17	0	0	0	0
30 _ 39	0	0	0	0	0	12	0	17	0	0	0	0
40 _ 49	0	0	0	0	0	10	0	16	0	0	0	0
50 _ 59	0	0	0	0	0	9	0	15	0	0	0	0
60 _ 69	0	0	0	0	0	2	0	12	0	0	0	0
70 _ 79	0	0	0	0	0	2	0	7	0	0	0	0
80 _ 89	0	0	0	0	0	1	0	4	0	0	0	0
90 _ 99	0	0	0	0	0	1	0	3	0	0	0	0
100 _ 109	0	0	0	0	0	0	0	1	0	0	0	0
110 _ 119	0	0	0	0	0	0	0	0	0	0	0	0
120 _ 129	0	0	0	0	0	0	0	0	0	0	0	0
130 _ 139	0	0	0	0	0	0	0	0	0	0	0	0
140 _ 149	0	0	0	0	0	0	0	0	0	0	0	0
150 _ 159	0	0	0	0	0	0	0	0	0	0	0	0
160 _ 169	0	0	0	0	0	0	0	0	0	0	0	0
170 _ 179	0	0	0	0	0	0	0	0	0	0	0	0
180 _ 189	0	0	0	0	0	0	0	0	0	0	0	0
190 _ 199	0	0	0	0	0	0	0	0	0	0	0	0

AVERAGE TEMPERATURE BY 10 M. LAYER

LATITUDE= 41 N LONGTITUDE=86 W 1955

INTERVAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 _ 9	0.0	0.0	0.0	0.0	0.0	16.5	0.0	20.5	0.0	0.0	0.0	0.0
10 _ 19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21.1	0.0	0.0	0.0	0.0
20 _ 29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.6	0.0	0.0	0.0	0.0
30 _ 39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.0	0.0	0.0	0.0	0.0
40 _ 49	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.2	0.0	0.0	0.0	0.0
50 _ 59	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
60 _ 69	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70 _ 79	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80 _ 89	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90 _ 99	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

NUMBER OF BT"S USED TO COMPUTE AVER. TEMPERATURE

LATITUDE= 41 N LONGTITUDE=86 W 1955

INTERVAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 _ 9	0	0	0	0	0	1	0	3	0	0	0	0
10 _ 19	0	0	0	0	0	0	0	1	0	0	0	0
20 _ 29	0	0	0	0	0	0	0	1	0	0	0	0
30 _ 39	0	0	0	0	0	0	0	1	0	0	0	0
40 _ 49	0	0	0	0	0	0	0	1	0	0	0	0
50 _ 59	0	0	0	0	0	0	0	0	0	0	0	0
60 _ 69	0	0	0	0	0	0	0	0	0	0	0	0
70 _ 79	0	0	0	0	0	0	0	0	0	0	0	0
80 _ 89	0	0	0	0	0	0	0	0	0	0	0	0
90 _ 99	0	0	0	0	0	0	0	0	0	0	0	0

AVERAGE TEMPERATURE BY 10 M. LAYER

LATITUDE= 42 N LONGTITUDE=86 W 1955

INTERVAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 _ 9	0.0	0.0	0.0	0.0	0.0	17.0	0.0	0.0	0.0	0.0	0.0	0.0
10 _ 19	0.0	0.0	0.0	0.0	0.0	12.4	0.0	0.0	0.0	0.0	0.0	0.0
20 _ 29	0.0	0.0	0.0	0.0	0.0	9.2	0.0	0.0	0.0	0.0	0.0	0.0
30 _ 39	0.0	0.0	0.0	0.0	0.0	7.4	0.0	0.0	0.0	0.0	0.0	0.0
40 _ 49	0.0	0.0	0.0	0.0	0.0	6.4	0.0	0.0	0.0	0.0	0.0	0.0
50 _ 59	0.0	0.0	0.0	0.0	0.0	5.7	0.0	0.0	0.0	0.0	0.0	0.0
60 _ 69	0.0	0.0	0.0	0.0	0.0	5.5	0.0	0.0	0.0	0.0	0.0	0.0
70 _ 79	0.0	0.0	0.0	0.0	0.0	5.3	0.0	0.0	0.0	0.0	0.0	0.0
80 _ 89	0.0	0.0	0.0	0.0	0.0	5.1	0.0	0.0	0.0	0.0	0.0	0.0
90 _ 99	0.0	0.0	0.0	0.0	0.0	5.1	0.0	0.0	0.0	0.0	0.0	0.0
100 _ 109	0.0	0.0	0.0	0.0	0.0	5.0	0.0	0.0	0.0	0.0	0.0	0.0
110 _ 119	0.0	0.0	0.0	0.0	0.0	5.2	0.0	0.0	0.0	0.0	0.0	0.0
120 _ 129	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130 _ 139	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140 _ 149	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150 _ 159	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160 _ 169	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170 _ 179	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180 _ 189	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
190 _ 199	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

NUMBER OF BT"S USED TO COMPUTE AVER. TEMPERATURE

LATITUDE= 42 N LONGTITUDE=86 W 1955

INTERVAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 _ 9	0	0	0	0	0	8	0	0	0	0	0	0
10 _ 19	0	0	0	0	0	7	0	0	0	0	0	0
20 _ 29	0	0	0	0	0	6	0	0	0	0	0	0
30 _ 39	0	0	0	0	0	6	0	0	0	0	0	0
40 _ 49	0	0	0	0	0	6	0	0	0	0	0	0
50 _ 59	0	0	0	0	0	4	0	0	0	0	0	0
60 _ 69	0	0	0	0	0	4	0	0	0	0	0	0
70 _ 79	0	0	0	0	0	2	0	0	0	0	0	0
80 _ 89	0	0	0	0	0	2	0	0	0	0	0	0
90 _ 99	0	0	0	0	0	2	0	0	0	0	0	0
100 _ 109	0	0	0	0	0	2	0	0	0	0	0	0
110 _ 119	0	0	0	0	0	1	0	0	0	0	0	0
120 _ 129	0	0	0	0	0	0	0	0	0	0	0	0
130 _ 139	0	0	0	0	0	0	0	0	0	0	0	0
140 _ 149	0	0	0	0	0	0	0	0	0	0	0	0
150 _ 159	0	0	0	0	0	0	0	0	0	0	0	0
160 _ 169	0	0	0	0	0	0	0	0	0	0	0	0
170 _ 179	0	0	0	0	0	0	0	0	0	0	0	0
180 _ 189	0	0	0	0	0	0	0	0	0	0	0	0
190 _ 199	0	0	0	0	0	0	0	0	0	0	0	0

Table B-2 (Continued)

AVERAGE TEMPERATURE BY 10 M. LAYER

LATITUDE= 43 N LONGTITUDE=86 W 1955

INTERVAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 _ 9	0.0	0.0	0.0	0.0	0.0	14.2	0.0	17.7	0.0	0.0	0.0	0.0
10 _ 19	0.0	0.0	0.0	0.0	0.0	8.0	0.0	14.2	0.0	0.0	0.0	0.0
20 _ 29	0.0	0.0	0.0	0.0	0.0	6.0	0.0	6.8	0.0	0.0	0.0	0.0
30 _ 39	0.0	0.0	0.0	0.0	0.0	5.5	0.0	5.6	0.0	0.0	0.0	0.0
40 _ 49	0.0	0.0	0.0	0.0	0.0	4.7	0.0	5.2	0.0	0.0	0.0	0.0
50 _ 59	0.0	0.0	0.0	0.0	0.0	4.6	0.0	4.8	0.0	0.0	0.0	0.0
60 _ 69	0.0	0.0	0.0	0.0	0.0	4.4	0.0	4.7	0.0	0.0	0.0	0.0
70 _ 79	0.0	0.0	0.0	0.0	0.0	4.3	0.0	4.6	0.0	0.0	0.0	0.0
80 _ 89	0.0	0.0	0.0	0.0	0.0	4.2	0.0	4.5	0.0	0.0	0.0	0.0
90 _ 99	0.0	0.0	0.0	0.0	0.0	4.2	0.0	4.4	0.0	0.0	0.0	0.0
100 _ 109	0.0	0.0	0.0	0.0	0.0	4.1	0.0	4.2	0.0	0.0	0.0	0.0
110 _ 119	0.0	0.0	0.0	0.0	0.0	4.0	0.0	4.1	0.0	0.0	0.0	0.0
120 _ 129	0.0	0.0	0.0	0.0	0.0	3.9	0.0	4.0	0.0	0.0	0.0	0.0
130 _ 139	0.0	0.0	0.0	0.0	0.0	3.9	0.0	0.0	0.0	0.0	0.0	0.0
140 _ 149	0.0	0.0	0.0	0.0	0.0	3.9	0.0	0.0	0.0	0.0	0.0	0.0
150 _ 159	0.0	0.0	0.0	0.0	0.0	3.9	0.0	0.0	0.0	0.0	0.0	0.0
160 _ 169	0.0	0.0	0.0	0.0	0.0	3.9	0.0	0.0	0.0	0.0	0.0	0.0
170 _ 179	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180 _ 189	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
190 _ 199	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

NUMBER OF BTMS USED TO COMPUTE AVER. TEMPERATURE

LATITUDE= 43 N LONGTITUDE=86 W 1955

INTERVAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 _ 9	0	0	0	0	0	19	0	16	0	0	0	0
10 _ 19	0	0	0	0	0	14	0	12	0	0	0	0
20 _ 29	0	0	0	0	0	14	0	12	0	0	0	0
30 _ 39	0	0	0	0	0	12	0	12	0	0	0	0
40 _ 49	0	0	0	0	0	13	0	12	0	0	0	0
50 _ 59	0	0	0	0	0	12	0	11	0	0	0	0
60 _ 69	0	0	0	0	0	12	0	9	0	0	0	0
70 _ 79	0	0	0	0	0	10	0	9	0	0	0	0
80 _ 89	0	0	0	0	0	10	0	9	0	0	0	0
90 _ 99	0	0	0	0	0	9	0	9	0	0	0	0
100 _ 109	0	0	0	0	0	7	0	7	0	0	0	0
110 _ 119	0	0	0	0	0	4	0	6	0	0	0	0
120 _ 129	0	0	0	0	0	4	0	5	0	0	0	0
130 _ 139	0	0	0	0	0	3	0	0	0	0	0	0
140 _ 149	0	0	0	0	0	3	0	0	0	0	0	0
150 _ 159	0	0	0	0	0	3	0	0	0	0	0	0
160 _ 169	0	0	0	0	0	1	0	0	0	0	0	0
170 _ 179	0	0	0	0	0	0	0	0	0	0	0	0
180 _ 189	0	0	0	0	0	0	0	0	0	0	0	0
190 _ 199	0	0	0	0	0	0	0	0	0	0	0	0

AVERAGE TEMPERATURE BY 10 M. LAYER

LATITUDE= 44 N LONGTITUDE=86 W 1955

INTERVAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 _ 9	0.0	0.0	0.0	0.0	0.0	13.0	0.0	17.8	0.0	0.0	0.0	0.0
10 _ 19	0.0	0.0	0.0	0.0	0.0	7.1	0.0	12.6	0.0	0.0	0.0	0.0
20 _ 29	0.0	0.0	0.0	0.0	0.0	5.3	0.0	6.8	0.0	0.0	0.0	0.0
30 _ 39	0.0	0.0	0.0	0.0	0.0	4.7	0.0	5.3	0.0	0.0	0.0	0.0
40 _ 49	0.0	0.0	0.0	0.0	0.0	4.2	0.0	5.0	0.0	0.0	0.0	0.0
50 _ 59	0.0	0.0	0.0	0.0	0.0	4.1	0.0	4.7	0.0	0.0	0.0	0.0
60 _ 69	0.0	0.0	0.0	0.0	0.0	4.0	0.0	4.6	0.0	0.0	0.0	0.0
70 _ 79	0.0	0.0	0.0	0.0	0.0	3.9	0.0	4.4	0.0	0.0	0.0	0.0
80 _ 89	0.0	0.0	0.0	0.0	0.0	3.9	0.0	4.4	0.0	0.0	0.0	0.0
90 _ 99	0.0	0.0	0.0	0.0	0.0	3.8	0.0	4.3	0.0	0.0	0.0	0.0
100 _ 109	0.0	0.0	0.0	0.0	0.0	3.8	0.0	4.3	0.0	0.0	0.0	0.0
110 _ 119	0.0	0.0	0.0	0.0	0.0	3.8	0.0	4.2	0.0	0.0	0.0	0.0
120 _ 129	0.0	0.0	0.0	0.0	0.0	3.8	0.0	4.2	0.0	0.0	0.0	0.0
130 _ 139	0.0	0.0	0.0	0.0	0.0	3.8	0.0	4.2	0.0	0.0	0.0	0.0
140 _ 149	0.0	0.0	0.0	0.0	0.0	3.8	0.0	4.2	0.0	0.0	0.0	0.0
150 _ 159	0.0	0.0	0.0	0.0	0.0	3.8	0.0	4.1	0.0	0.0	0.0	0.0
160 _ 169	0.0	0.0	0.0	0.0	0.0	3.7	0.0	4.0	0.0	0.0	0.0	0.0
170 _ 179	0.0	0.0	0.0	0.0	0.0	3.7	0.0	4.0	0.0	0.0	0.0	0.0
180 _ 189	0.0	0.0	0.0	0.0	0.0	3.7	0.0	3.9	0.0	0.0	0.0	0.0
190 _ 199	0.0	0.0	0.0	0.0	0.0	3.7	0.0	3.9	0.0	0.0	0.0	0.0
200 _ 209	0.0	0.0	0.0	0.0	0.0	3.7	0.0	3.9	0.0	0.0	0.0	0.0
210 _ 219	0.0	0.0	0.0	0.0	0.0	3.7	0.0	3.8	0.0	0.0	0.0	0.0
220 _ 229	0.0	0.0	0.0	0.0	0.0	3.6	0.0	3.7	0.0	0.0	0.0	0.0
230 _ 239	0.0	0.0	0.0	0.0	0.0	3.6	0.0	3.8	0.0	0.0	0.0	0.0
240 _ 249	0.0	0.0	0.0	0.0	0.0	3.6	0.0	0.0	0.0	0.0	0.0	0.0
250 _ 259	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
260 _ 269	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
270 _ 279	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
280 _ 289	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
290 _ 299	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

NUMBER OF BTMS USED TO COMPUTE AVER. TEMPERATURE

LATITUDE= 44 N LONGTITUDE=86 W 1955

INTERVAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 _ 9	0	0	0	0	0	10	0	13	0	0	0	0
10 _ 19	0	0	0	0	0	10	0	13	0	0	0	0
20 _ 29	0	0	0	0	0	9	0	12	0	0	0	0
30 _ 39	0	0	0	0	0	9	0	12	0	0	0	0
40 _ 49	0	0	0	0	0	7	0	11	0	0	0	0
50 _ 59	0	0	0	0	0	7	0	11	0	0	0	0
60 _ 69	0	0	0	0	0	7	0	8	0	0	0	0
70 _ 79	0	0	0	0	0	7	0	8	0	0	0	0
80 _ 89	0	0	0	0	0	7	0	8	0	0	0	0
90 _ 99	0	0	0	0	0	7	0	8	0	0	0	0
100 _ 109	0	0	0	0	0	6	0	8	0	0	0	0
110 _ 119	0	0	0	0	0	6	0	8	0	0	0	0
120 _ 129	0	0	0	0	0	6	0	8	0	0	0	0
130 _ 139	0	0	0	0	0	6	0	6	0	0	0	0
140 _ 149	0	0	0	0	0	5	0	6	0	0	0	0
150 _ 159	0	0	0	0	0	5	0	6	0	0	0	0
160 _ 169	0	0	0	0	0	5	0	5	0	0	0	0
170 _ 179	0	0	0	0	0	5	0	5	0	0	0	0
180 _ 189	0	0	0	0	0	5	0	5	0	0	0	0
190 _ 199	0	0	0	0	0	5	0	4	0	0	0	0
200 _ 209	0	0	0	0	0	5	0	4	0	0	0	0
210 _ 219	0	0	0	0	0	4	0	4	0	0	0	0
220 _ 229	0	0	0	0	0	2	0	3	0	0	0	0
230 _ 239	0	0	0	0	0	2	0	1	0	0	0	0
240 _ 249	0	0	0	0	0	2	0	0	0	0	0	0
250 _ 259	0	0	0	0	0	0	0	0	0	0	0	0
260 _ 269	0	0	0	0	0	0	0	0	0	0	0	0
270 _ 279	0	0	0	0	0	0	0	0	0	0	0	0
280 _ 289	0	0	0	0	0	0	0	0	0	0	0	0
290 _ 299	0	0	0	0	0	0	0	0	0	0	0	0

Table B-2 (Continued)

AVERAGE TEMPERATURE BY 10 M. LAYER

LATITUDE= 45 N LONGTITUDE=86 W 1955

INTERVAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 _ 9	0.0	0.0	0.0	0.0	0.0	13.1	0.0	20.9	0.0	0.0	0.0	0.0
10 _ 19	0.0	0.0	0.0	0.0	0.0	8.7	0.0	17.2	0.0	0.0	0.0	0.0
20 _ 29	0.0	0.0	0.0	0.0	0.0	4.8	0.0	8.9	0.0	0.0	0.0	0.0
30 _ 39	0.0	0.0	0.0	0.0	0.0	4.5	0.0	5.5	0.0	0.0	0.0	0.0
40 _ 49	0.0	0.0	0.0	0.0	0.0	4.1	0.0	4.6	0.0	0.0	0.0	0.0
50 _ 59	0.0	0.0	0.0	0.0	0.0	4.0	0.0	4.3	0.0	0.0	0.0	0.0
60 _ 69	0.0	0.0	0.0	0.0	0.0	4.0	0.0	4.2	0.0	0.0	0.0	0.0
70 _ 79	0.0	0.0	0.0	0.0	0.0	3.9	0.0	4.0	0.0	0.0	0.0	0.0
80 _ 89	0.0	0.0	0.0	0.0	0.0	3.8	0.0	4.0	0.0	0.0	0.0	0.0
90 _ 99	0.0	0.0	0.0	0.0	0.0	3.8	0.0	3.9	0.0	0.0	0.0	0.0
100 _ 109	0.0	0.0	0.0	0.0	0.0	3.7	0.0	3.9	0.0	0.0	0.0	0.0
110 _ 119	0.0	0.0	0.0	0.0	0.0	3.7	0.0	3.8	0.0	0.0	0.0	0.0
120 _ 129	0.0	0.0	0.0	0.0	0.0	3.7	0.0	3.8	0.0	0.0	0.0	0.0
130 _ 139	0.0	0.0	0.0	0.0	0.0	3.7	0.0	3.8	0.0	0.0	0.0	0.0
140 _ 149	0.0	0.0	0.0	0.0	0.0	3.7	0.0	3.8	0.0	0.0	0.0	0.0
150 _ 159	0.0	0.0	0.0	0.0	0.0	3.7	0.0	3.7	0.0	0.0	0.0	0.0
160 _ 169	0.0	0.0	0.0	0.0	0.0	3.7	0.0	3.7	0.0	0.0	0.0	0.0
170 _ 179	0.0	0.0	0.0	0.0	0.0	3.7	0.0	0.0	0.0	0.0	0.0	0.0
180 _ 189	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
190 _ 199	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

NUMBER OF BT"S USED TO COMPUTE AVER. TEMPERATURE

LATITUDE= 45 N LONGTITUDE=86 W 1955

INTERVAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 _ 9	0	0	0	0	0	14	0	16	0	0	0	0
10 _ 19	0	0	0	0	0	11	0	13	0	0	0	0
20 _ 29	0	0	0	0	0	8	0	10	0	0	0	0
30 _ 39	0	0	0	0	0	4	0	7	0	0	0	0
40 _ 49	0	0	0	0	0	2	0	5	0	0	0	0
50 _ 59	0	0	0	0	0	2	0	5	0	0	0	0
60 _ 69	0	0	0	0	0	2	0	4	0	0	0	0
70 _ 79	0	0	0	0	0	2	0	4	0	0	0	0
80 _ 89	0	0	0	0	0	2	0	4	0	0	0	0
90 _ 99	0	0	0	0	0	2	0	4	0	0	0	0
100 _ 109	0	0	0	0	0	2	0	3	0	0	0	0
110 _ 119	0	0	0	0	0	2	0	3	0	0	0	0
120 _ 129	0	0	0	0	0	1	0	3	0	0	0	0
130 _ 139	0	0	0	0	0	1	0	3	0	0	0	0
140 _ 149	0	0	0	0	0	1	0	1	0	0	0	0
150 _ 159	0	0	0	0	0	1	0	1	0	0	0	0
160 _ 169	0	0	0	0	0	1	0	1	0	0	0	0
170 _ 179	0	0	0	0	0	1	0	0	0	0	0	0
180 _ 189	0	0	0	0	0	0	0	0	0	0	0	0
190 _ 199	0	0	0	0	0	0	0	0	0	0	0	0

AVERAGE TEMPERATURE BY 10 M. LAYER

LATITUDE= 41 N LONGTITUDE=87 W 1955

INTERVAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 _ 9	0.0	0.0	0.0	0.0	0.0	17.3	0.0	22.9	0.0	0.0	0.0	0.0
10 _ 19	0.0	0.0	0.0	0.0	0.0	11.3	0.0	21.3	0.0	0.0	0.0	0.0
20 _ 29	0.0	0.0	0.0	0.0	0.0	8.9	0.0	11.8	0.0	0.0	0.0	0.0
30 _ 39	0.0	0.0	0.0	0.0	0.0	7.2	0.0	8.1	0.0	0.0	0.0	0.0
40 _ 49	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.9	0.0	0.0	0.0	0.0
50 _ 59	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.3	0.0	0.0	0.0	0.0
60 _ 69	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70 _ 79	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80 _ 89	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90 _ 99	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

NUMBER OF BT"S USED TO COMPUTE AVER. TEMPERATURE

LATITUDE= 41 N LONGTITUDE=87 W 1955

INTERVAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 _ 9	0	0	0	0	0	7	0	3	0	0	0	0
10 _ 19	0	0	0	0	0	7	0	3	0	0	0	0
20 _ 29	0	0	0	0	0	5	0	3	0	0	0	0
30 _ 39	0	0	0	0	0	2	0	2	0	0	0	0
40 _ 49	0	0	0	0	0	0	0	1	0	0	0	0
50 _ 59	0	0	0	0	0	0	0	1	0	0	0	0
60 _ 69	0	0	0	0	0	0	0	0	0	0	0	0
70 _ 79	0	0	0	0	0	0	0	0	0	0	0	0
80 _ 89	0	0	0	0	0	0	0	0	0	0	0	0
90 _ 99	0	0	0	0	0	0	0	0	0	0	0	0

AVERAGE TEMPERATURE BY 10 M. LAYER

LATITUDE= 42 N LONGTITUDE=87 W 1955

INTERVAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 _ 9	0.0	0.0	0.0	0.0	0.0	16.8	0.0	23.2	0.0	0.0	0.0	0.0
10 _ 19	0.0	0.0	0.0	0.0	0.0	9.5	0.0	19.6	0.0	0.0	0.0	0.0
20 _ 29	0.0	0.0	0.0	0.0	0.0	7.9	0.0	10.1	0.0	0.0	0.0	0.0
30 _ 39	0.0	0.0	0.0	0.0	0.0	6.9	0.0	7.2	0.0	0.0	0.0	0.0
40 _ 49	0.0	0.0	0.0	0.0	0.0	6.2	0.0	6.1	0.0	0.0	0.0	0.0
50 _ 59	0.0	0.0	0.0	0.0	0.0	5.7	0.0	5.4	0.0	0.0	0.0	0.0
60 _ 69	0.0	0.0	0.0	0.0	0.0	5.3	0.0	5.3	0.0	0.0	0.0	0.0
70 _ 79	0.0	0.0	0.0	0.0	0.0	5.1	0.0	0.0	0.0	0.0	0.0	0.0
80 _ 89	0.0	0.0	0.0	0.0	0.0	4.8	0.0	0.0	0.0	0.0	0.0	0.0
90 _ 99	0.0	0.0	0.0	0.0	0.0	3.9	0.0	0.0	0.0	0.0	0.0	0.0
100 _ 109	0.0	0.0	0.0	0.0	0.0	4.6	0.0	0.0	0.0	0.0	0.0	0.0
110 _ 119	0.0	0.0	0.0	0.0	0.0	4.2	0.0	0.0	0.0	0.0	0.0	0.0
120 _ 129	0.0	0.0	0.0	0.0	0.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0
130 _ 139	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140 _ 149	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150 _ 159	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160 _ 169	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170 _ 179	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180 _ 189	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
190 _ 199	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

NUMBER OF BT"S USED TO COMPUTE AVER. TEMPERATURE

LATITUDE= 42 N LONGTITUDE=87 W 1955

INTERVAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 _ 9	0	0	0	0	0	20	0	12	0	0	0	0
10 _ 19	0	0	0	0	0	18	0	9	0	0	0	0
20 _ 29	0	0	0	0	0	15	0	9	0	0	0	0
30 _ 39	0	0	0	0	0	12	0	8	0	0	0	0
40 _ 49	0	0	0	0	0	9	0	6	0	0	0	0
50 _ 59	0	0	0	0	0	8	0	3	0	0	0	0
60 _ 69	0	0	0	0	0	7	0	2	0	0	0	0
70 _ 79	0	0	0	0	0	6	0	0	0	0	0	0
80 _ 89	0	0	0	0	0	5	0	0	0	0	0	0
90 _ 99	0	0	0	0	0	5	0	0	0	0	0	0
100 _ 109	0	0	0	0	0	4	0	0	0	0	0	0
110 _ 119	0	0	0	0	0	2	0	0	0	0	0	0
120 _ 129	0	0	0	0	0	1	0	0	0	0	0	0
130 _ 139	0	0	0	0	0	0	0	0	0	0	0	0
140 _ 149	0	0	0	0	0	0	0	0	0	0	0	0
150 _ 159	0	0	0	0	0	0	0	0	0	0	0	0
160 _ 169	0	0	0	0	0	0	0	0	0	0	0	0
170 _ 179	0	0	0	0	0	0	0	0	0	0	0	0
180 _ 189	0	0	0	0	0	0	0	0	0	0	0	0
190 _ 199	0	0	0	0	0	0	0	0	0	0	0	0

Table B-2 (Concluded)

AVERAGE TEMPERATURE BY 10 M. LAYER

LATITUDE= 43 N LONGTITUDE=87 W 1955

INTERVAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 _ 9	0.0	0.0	0.0	0.0	0.0	14.7	0.0	22.0	0.0	0.0	0.0	0.0
10 _ 19	0.0	0.0	0.0	0.0	0.0	7.6	0.0	17.5	0.0	0.0	0.0	0.0
20 _ 29	0.0	0.0	0.0	0.0	0.0	6.4	0.0	8.2	0.0	0.0	0.0	0.0
30 _ 39	0.0	0.0	0.0	0.0	0.0	5.9	0.0	6.6	0.0	0.0	0.0	0.0
40 _ 49	0.0	0.0	0.0	0.0	0.0	5.5	0.0	5.9	0.0	0.0	0.0	0.0
50 _ 59	0.0	0.0	0.0	0.0	0.0	4.9	0.0	5.4	0.0	0.0	0.0	0.0
60 _ 69	0.0	0.0	0.0	0.0	0.0	4.6	0.0	5.1	0.0	0.0	0.0	0.0
70 _ 79	0.0	0.0	0.0	0.0	0.0	4.5	0.0	4.8	0.0	0.0	0.0	0.0
80 _ 89	0.0	0.0	0.0	0.0	0.0	4.2	0.0	4.5	0.0	0.0	0.0	0.0
90 _ 99	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.3	0.0	0.0	0.0	0.0

NUMBER OF BT"S USED TO COMPUTE AVER. TEMPERATURE

LATITUDE= 43 N LONGTITUDE=87 W 1955

INTERVAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 _ 9	0	0	0	0	0	12	0	13	0	0	0	0
10 _ 19	0	0	0	0	0	12	0	12	0	0	0	0
20 _ 29	0	0	0	0	0	11	0	12	0	0	0	0
30 _ 39	0	0	0	0	0	10	0	12	0	0	0	0
40 _ 49	0	0	0	0	0	10	0	11	0	0	0	0
50 _ 59	0	0	0	0	0	10	0	11	0	0	0	0
60 _ 69	0	0	0	0	0	10	0	10	0	0	0	0
70 _ 79	0	0	0	0	0	7	0	8	0	0	0	0
80 _ 89	0	0	0	0	0	4	0	5	0	0	0	0
90 _ 99	0	0	0	0	0	0	0	2	0	0	0	0

AVERAGE TEMPERATURE BY 10 M. LAYER

LATITUDE= 44 N LONGTITUDE=87 W 1955

INTERVAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 _ 9	0.0	0.0	0.0	0.0	0.0	13.2	0.0	21.8	0.0	0.0	0.0	0.0
10 _ 19	0.0	0.0	0.0	0.0	0.0	6.7	0.0	13.8	0.0	0.0	0.0	0.0
20 _ 29	0.0	0.0	0.0	0.0	0.0	6.0	0.0	6.9	0.0	0.0	0.0	0.0
30 _ 39	0.0	0.0	0.0	0.0	0.0	5.6	0.0	5.5	0.0	0.0	0.0	0.0
40 _ 49	0.0	0.0	0.0	0.0	0.0	5.7	0.0	5.1	0.0	0.0	0.0	0.0
50 _ 59	0.0	0.0	0.0	0.0	0.0	6.6	0.0	4.9	0.0	0.0	0.0	0.0
60 _ 69	0.0	0.0	0.0	0.0	0.0	7.7	0.0	4.7	0.0	0.0	0.0	0.0
70 _ 79	0.0	0.0	0.0	0.0	0.0	10.1	0.0	4.5	0.0	0.0	0.0	0.0
80 _ 89	0.0	0.0	0.0	0.0	0.0	8.2	0.0	4.5	0.0	0.0	0.0	0.0
90 _ 99	0.0	0.0	0.0	0.0	0.0	5.7	0.0	4.3	0.0	0.0	0.0	0.0
100 _ 109	0.0	0.0	0.0	0.0	0.0	3.8	0.0	4.4	0.0	0.0	0.0	0.0
110 _ 119	0.0	0.0	0.0	0.0	0.0	3.7	0.0	4.3	0.0	0.0	0.0	0.0
120 _ 129	0.0	0.0	0.0	0.0	0.0	3.7	0.0	4.3	0.0	0.0	0.0	0.0
130 _ 139	0.0	0.0	0.0	0.0	0.0	3.7	0.0	4.2	0.0	0.0	0.0	0.0
140 _ 149	0.0	0.0	0.0	0.0	0.0	3.7	0.0	4.2	0.0	0.0	0.0	0.0
150 _ 159	0.0	0.0	0.0	0.0	0.0	3.6	0.0	4.0	0.0	0.0	0.0	0.0
160 _ 169	0.0	0.0	0.0	0.0	0.0	3.6	0.0	3.9	0.0	0.0	0.0	0.0
170 _ 179	0.0	0.0	0.0	0.0	0.0	3.6	0.0	0.0	0.0	0.0	0.0	0.0
180 _ 189	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
190 _ 199	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

NUMBER OF BT"S USED TO COMPUTE AVER. TEMPERATURE

LATITUDE= 44 N LONGTITUDE=87 W 1955

INTERVAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 _ 9	0	0	0	0	0	9	0	10	0	0	0	0
10 _ 19	0	0	0	0	0	6	0	6	0	0	0	0
20 _ 29	0	0	0	0	0	5	0	6	0	0	0	0
30 _ 39	0	0	0	0	0	5	0	6	0	0	0	0
40 _ 49	0	0	0	0	0	5	0	6	0	0	0	0
50 _ 59	0	0	0	0	0	4	0	6	0	0	0	0
60 _ 69	0	0	0	0	0	4	0	6	0	0	0	0
70 _ 79	0	0	0	0	0	3	0	6	0	0	0	0
80 _ 89	0	0	0	0	0	3	0	4	0	0	0	0
90 _ 99	0	0	0	0	0	3	0	4	0	0	0	0
100 _ 109	0	0	0	0	0	2	0	3	0	0	0	0
110 _ 119	0	0	0	0	0	1	0	3	0	0	0	0
120 _ 129	0	0	0	0	0	1	0	2	0	0	0	0
130 _ 139	0	0	0	0	0	1	0	2	0	0	0	0
140 _ 149	0	0	0	0	0	1	0	1	0	0	0	0
150 _ 159	0	0	0	0	0	1	0	1	0	0	0	0
160 _ 169	0	0	0	0	0	1	0	1	0	0	0	0
170 _ 179	0	0	0	0	0	1	0	0	0	0	0	0
180 _ 189	0	0	0	0	0	0	0	0	0	0	0	0
190 _ 199	0	0	0	0	0	0	0	0	0	0	0	0

AVERAGE TEMPERATURE BY 10 M. LAYER

LATITUDE= 45 N LONGTITUDE=87 W 1955

INTERVAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 _ 9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10 _ 19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20 _ 29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30 _ 39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40 _ 49	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50 _ 59	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
60 _ 69	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70 _ 79	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80 _ 89	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90 _ 99	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

NUMBER OF BT"S USED TO COMPUTE AVER. TEMPERATURE

LATITUDE= 45 N LONGTITUDE=87 W 1955

INTERVAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 _ 9	0	0	0	0	0	0	0	0	0	0	0	0
10 _ 19	0	0	0	0	0	0	0	0	0	0	0	0
20 _ 29	0	0	0	0	0	0	0	0	0	0	0	0
30 _ 39	0	0	0	0	0	0	0	0	0	0	0	0
40 _ 49	0	0	0	0	0	0	0	0	0	0	0	0
50 _ 59	0	0	0	0	0	0	0	0	0	0	0	0
60 _ 69	0	0	0	0	0	0	0	0	0	0	0	0
70 _ 79	0	0	0	0	0	0	0	0	0	0	0	0
80 _ 89	0	0	0	0	0	0	0	0	0	0	0	0
90 _ 99	0	0	0	0	0	0	0	0	0	0	0	0

Table B-3

AVERAGE TEMPERATURE BY 10 M. LAYER

LATITUDE= 45 N LONGTITUDE=85 W 1961

INTERVAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 _ 9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10 _ 19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20 _ 29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30 _ 39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40 _ 49	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50 _ 59	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
60 _ 69	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70 _ 79	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80 _ 89	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90 _ 99	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

NUMBER OF BT"S USED TO COMPUTE AVER. TEMPERATURE

LATITUDE= 45 N LONGTITUDE=85 W 1961

INTERVAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 _ 9	0	0	0	0	0	0	0	0	0	0	0	0
10 _ 19	0	0	0	0	0	0	0	0	0	0	0	0
20 _ 29	0	0	0	0	0	0	0	0	0	0	0	0
30 _ 39	0	0	0	0	0	0	0	0	0	0	0	0
40 _ 49	0	0	0	0	0	0	0	0	0	0	0	0
50 _ 59	0	0	0	0	0	0	0	0	0	0	0	0
60 _ 69	0	0	0	0	0	0	0	0	0	0	0	0
70 _ 79	0	0	0	0	0	0	0	0	0	0	0	0
80 _ 89	0	0	0	0	0	0	0	0	0	0	0	0
90 _ 99	0	0	0	0	0	0	0	0	0	0	0	0

AVERAGE TEMPERATURE BY 10 M. LAYER

LATITUDE= 41 N LONGTITUDE=86 W 1961

INTERVAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 _ 9	0.0	0.0	0.0	0.0	0.0	0.0	21.0	18.6	0.0	0.0	0.0	0.0
10 _ 19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.2	0.0	0.0	0.0	0.0
20 _ 29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30 _ 39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40 _ 49	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50 _ 59	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
60 _ 69	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70 _ 79	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80 _ 89	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90 _ 99	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

NUMBER OF BT"S USED TO COMPUTE AVER. TEMPERATURE

LATITUDE= 41 N LONGTITUDE=86 W 1961

INTERVAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 _ 9	0	0	0	0	0	0	5	18	0	0	0	0
10 _ 19	0	0	0	0	0	0	0	1	0	0	0	0
20 _ 29	0	0	0	0	0	0	0	0	0	0	0	0
30 _ 39	0	0	0	0	0	0	0	0	0	0	0	0
40 _ 49	0	0	0	0	0	0	0	0	0	0	0	0
50 _ 59	0	0	0	0	0	0	0	0	0	0	0	0
60 _ 69	0	0	0	0	0	0	0	0	0	0	0	0
70 _ 79	0	0	0	0	0	0	0	0	0	0	0	0
80 _ 89	0	0	0	0	0	0	0	0	0	0	0	0
90 _ 99	0	0	0	0	0	0	0	0	0	0	0	0

AVERAGE TEMPERATURE BY 10 M. LAYER

LATITUDE= 42 N LONGTITUDE=86 W 1961

INTERVAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 _ 9	0.0	0.0	0.0	0.0	0.0	0.0	19.6	0.0	0.0	0.0	0.0	0.0
10 _ 19	0.0	0.0	0.0	0.0	0.0	0.0	12.3	0.0	0.0	0.0	0.0	0.0
20 _ 29	0.0	0.0	0.0	0.0	0.0	0.0	8.5	0.0	0.0	0.0	0.0	0.0
30 _ 39	0.0	0.0	0.0	0.0	0.0	0.0	7.8	0.0	0.0	0.0	0.0	0.0
40 _ 49	0.0	0.0	0.0	0.0	0.0	0.0	7.0	0.0	0.0	0.0	0.0	0.0
50 _ 59	0.0	0.0	0.0	0.0	0.0	0.0	6.8	0.0	0.0	0.0	0.0	0.0
60 _ 69	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70 _ 79	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80 _ 89	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90 _ 99	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

NUMBER OF BT"S USED TO COMPUTE AVER. TEMPERATURE

LATITUDE= 42 N LONGTITUDE=86 W 1961

INTERVAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 _ 9	0	0	0	0	0	0	40	0	0	0	0	0
10 _ 19	0	0	0	0	0	0	12	0	0	0	0	0
20 _ 29	0	0	0	0	0	0	6	0	0	0	0	0
30 _ 39	0	0	0	0	0	0	1	0	0	0	0	0
40 _ 49	0	0	0	0	0	0	1	0	0	0	0	0
50 _ 59	0	0	0	0	0	0	1	0	0	0	0	0
60 _ 69	0	0	0	0	0	0	0	0	0	0	0	0
70 _ 79	0	0	0	0	0	0	0	0	0	0	0	0
80 _ 89	0	0	0	0	0	0	0	0	0	0	0	0
90 _ 99	0	0	0	0	0	0	0	0	0	0	0	0

AVERAGE TEMPERATURE BY 10 M. LAYER

LATITUDE= 43 N LONGTITUDE=86 W 1961

INTERVAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 _ 9	0.0	0.0	0.0	0.0	0.0	0.0	11.8	0.0	0.0	0.0	0.0	0.0
10 _ 19	0.0	0.0	0.0	0.0	0.0	0.0	7.8	0.0	0.0	0.0	0.0	0.0
20 _ 29	0.0	0.0	0.0	0.0	0.0	0.0	6.7	0.0	0.0	0.0	0.0	0.0
30 _ 39	0.0	0.0	0.0	0.0	0.0	0.0	6.0	0.0	0.0	0.0	0.0	0.0
40 _ 49	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50 _ 59	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
60 _ 69	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70 _ 79	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80 _ 89	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90 _ 99	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

NUMBER OF BT"S USED TO COMPUTE AVER. TEMPERATURE

LATITUDE= 43 N LONGTITUDE=86 W 1961

INTERVAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 _ 9	0	0	0	0	0	0	21	0	0	0	0	0
10 _ 19	0	0	0	0	0	0	5	0	0	0	0	0
20 _ 29	0	0	0	0	0	0	2	0	0	0	0	0
30 _ 39	0	0	0	0	0	0	1	0	0	0	0	0
40 _ 49	0	0	0	0	0	0	0	0	0	0	0	0
50 _ 59	0	0	0	0	0	0	0	0	0	0	0	0
60 _ 69	0	0	0	0	0	0	0	0	0	0	0	0
70 _ 79	0	0	0	0	0	0	0	0	0	0	0	0
80 _ 89	0	0	0	0	0	0	0	0	0	0	0	0
90 _ 99	0	0	0	0	0	0	0	0	0	0	0	0

Table B-3 (Continued)

AVERAGE TEMPERATURE BY 10 M. LAYER

LATITUDE= 44 N LONGTITUDE=86 W 1961

INTERVAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 _ 9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10 _ 19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20 _ 29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30 _ 39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40 _ 49	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50 _ 59	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
60 _ 69	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70 _ 79	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80 _ 89	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90 _ 99	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

NUMBER OF BT"S USED TO COMPUTE AVER. TEMPERATURE

LATITUDE= 44 N LONGTITUDE=86 W 1961

INTERVAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 _ 9	0	0	0	0	0	0	0	0	0	0	0	0
10 _ 19	0	0	0	0	0	0	0	0	0	0	0	0
20 _ 29	0	0	0	0	0	0	0	0	0	0	0	0
30 _ 39	0	0	0	0	0	0	0	0	0	0	0	0
40 _ 49	0	0	0	0	0	0	0	0	0	0	0	0
50 _ 59	0	0	0	0	0	0	0	0	0	0	0	0
60 _ 69	0	0	0	0	0	0	0	0	0	0	0	0
70 _ 79	0	0	0	0	0	0	0	0	0	0	0	0
80 _ 89	0	0	0	0	0	0	0	0	0	0	0	0
90 _ 99	0	0	0	0	0	0	0	0	0	0	0	0

AVERAGE TEMPERATURE BY 10 M. LAYER

LATITUDE= 45 N LONGTITUDE=86 W 1961

INTERVAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 _ 9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10 _ 19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20 _ 29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30 _ 39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40 _ 49	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50 _ 59	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
60 _ 69	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70 _ 79	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80 _ 89	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90 _ 99	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

NUMBER OF BT"S USED TO COMPUTE AVER. TEMPERATURE

LATITUDE= 45 N LONGTITUDE=86 W 1961

INTERVAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 _ 9	0	0	0	0	0	0	0	0	0	0	0	0
10 _ 19	0	0	0	0	0	0	0	0	0	0	0	0
20 _ 29	0	0	0	0	0	0	0	0	0	0	0	0
30 _ 39	0	0	0	0	0	0	0	0	0	0	0	0
40 _ 49	0	0	0	0	0	0	0	0	0	0	0	0
50 _ 59	0	0	0	0	0	0	0	0	0	0	0	0
60 _ 69	0	0	0	0	0	0	0	0	0	0	0	0
70 _ 79	0	0	0	0	0	0	0	0	0	0	0	0
80 _ 89	0	0	0	0	0	0	0	0	0	0	0	0
90 _ 99	0	0	0	0	0	0	0	0	0	0	0	0

AVERAGE TEMPERATURE BY 10 M. LAYER

LATITUDE= 41 N LONGTITUDE=87 W 1961

INTERVAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 _ 9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21.3	0.0	0.0	0.0	0.0
10 _ 19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20 _ 29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30 _ 39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40 _ 49	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50 _ 59	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
60 _ 69	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70 _ 79	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80 _ 89	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90 _ 99	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

NUMBER OF BT"S USED TO COMPUTE AVER. TEMPERATURE

LATITUDE= 41 N LONGTITUDE=87 W 1961

INTERVAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 _ 9	0	0	0	0	0	0	0	27	0	0	0	0
10 _ 19	0	0	0	0	0	0	0	0	0	0	0	0
20 _ 29	0	0	0	0	0	0	0	0	0	0	0	0
30 _ 39	0	0	0	0	0	0	0	0	0	0	0	0
40 _ 49	0	0	0	0	0	0	0	0	0	0	0	0
50 _ 59	0	0	0	0	0	0	0	0	0	0	0	0
60 _ 69	0	0	0	0	0	0	0	0	0	0	0	0
70 _ 79	0	0	0	0	0	0	0	0	0	0	0	0
80 _ 89	0	0	0	0	0	0	0	0	0	0	0	0
90 _ 99	0	0	0	0	0	0	0	0	0	0	0	0

AVERAGE TEMPERATURE BY 10 M. LAYER

LATITUDE= 42 N LONGTITUDE=87 W 1961

INTERVAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 _ 9	0.0	0.0	0.0	0.0	0.0	0.0	20.9	18.4	0.0	0.0	0.0	0.0
10 _ 19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21.3	0.0	0.0	0.0	0.0
20 _ 29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.1	0.0	0.0	0.0	0.0
30 _ 39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.2	0.0	0.0	0.0	0.0
40 _ 49	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50 _ 59	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
60 _ 69	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70 _ 79	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80 _ 89	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90 _ 99	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

NUMBER OF BT"S USED TO COMPUTE AVER. TEMPERATURE

LATITUDE= 42 N LONGTITUDE=87 W 1961

INTERVAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 _ 9	0	0	0	0	0	0	3	29	0	0	0	0
10 _ 19	0	0	0	0	0	0	0	1	0	0	0	0
20 _ 29	0	0	0	0	0	0	0	1	0	0	0	0
30 _ 39	0	0	0	0	0	0	0	1	0	0	0	0
40 _ 49	0	0	0	0	0	0	0	0	0	0	0	0
50 _ 59	0	0	0	0	0	0	0	0	0	0	0	0
60 _ 69	0	0	0	0	0	0	0	0	0	0	0	0
70 _ 79	0	0	0	0	0	0	0	0	0	0	0	0
80 _ 89	0	0	0	0	0	0	0	0	0	0	0	0
90 _ 99	0	0	0	0	0	0	0	0	0	0	0	0

Table B-3 (Concluded)

AVERAGE TEMPERATURE BY 10 M. LAYER

LATITUDE= 43 N LONGTITUDE=87 W 1961

INTERVAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 _ 9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.3	0.0	0.0	0.0	0.0
10 _ 19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.7	0.0	0.0	0.0	0.0
20 _ 29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.4	0.0	0.0	0.0	0.0
30 _ 39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.7	0.0	0.0	0.0	0.0
40 _ 49	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.3	0.0	0.0	0.0	0.0
50 _ 59	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
60 _ 69	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70 _ 79	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80 _ 89	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90 _ 99	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

NUMBER OF BT"S USED TC COMPUTE AVER. TEMPERATURE

LATITUDE= 43 N LONGTITUDE=87 W 1961

INTERVAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 _ 9	0	0	0	0	0	0	0	11	0	0	0	0
10 _ 19	0	0	0	0	0	0	0	5	0	0	0	0
20 _ 29	0	0	0	0	0	0	0	1	0	0	0	0
30 _ 39	0	0	0	0	0	0	0	1	0	0	0	0
40 _ 49	0	0	0	0	0	0	0	1	0	0	0	0
50 _ 59	0	0	0	0	0	0	0	0	0	0	0	0
60 _ 69	0	0	0	0	0	0	0	0	0	0	0	0
70 _ 79	0	0	0	0	0	0	0	0	0	0	0	0
80 _ 89	0	0	0	0	0	0	0	0	0	0	0	0
90 _ 99	0	0	0	0	0	0	0	0	0	0	0	0

AVERAGE TEMPERATURE BY 10 M. LAYER

LATITUDE= 44 N LONGTITUDE=87 W 1961

INTERVAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 _ 9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10 _ 19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20 _ 29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30 _ 39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40 _ 49	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50 _ 59	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
60 _ 69	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70 _ 79	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80 _ 89	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90 _ 99	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

NUMBER OF BT"S USED TC COMPUTE AVER. TEMPERATURE

LATITUDE= 44 N LONGTITUDE=87 W 1961

INTERVAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 _ 9	0	0	0	0	0	0	0	0	0	0	0	0
10 _ 19	0	0	0	0	0	0	0	0	0	0	0	0
20 _ 29	0	0	0	0	0	0	0	0	0	0	0	0
30 _ 39	0	0	0	0	0	0	0	0	0	0	0	0
40 _ 49	0	0	0	0	0	0	0	0	0	0	0	0
50 _ 59	0	0	0	0	0	0	0	0	0	0	0	0
60 _ 69	0	0	0	0	0	0	0	0	0	0	0	0
70 _ 79	0	0	0	0	0	0	0	0	0	0	0	0
80 _ 89	0	0	0	0	0	0	0	0	0	0	0	0
90 _ 99	0	0	0	0	0	0	0	0	0	0	0	0

AVERAGE TEMPERATURE BY 10 M. LAYER

LATITUDE= 45 N LONGTITUDE=87 W 1961

INTERVAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 _ 9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10 _ 19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20 _ 29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30 _ 39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40 _ 49	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50 _ 59	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
60 _ 69	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70 _ 79	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80 _ 89	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90 _ 99	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

NUMBER OF BT"S USED TO COMPUTE AVER. TEMPERATURE

LATITUDE= 45 N LONGTITUDE=87 W 1961

INTERVAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 _ 9	0	0	0	0	0	0	0	0	0	0	0	0
10 _ 19	0	0	0	0	0	0	0	0	0	0	0	0
20 _ 29	0	0	0	0	0	0	0	0	0	0	0	0
30 _ 39	0	0	0	0	0	0	0	0	0	0	0	0
40 _ 49	0	0	0	0	0	0	0	0	0	0	0	0
50 _ 59	0	0	0	0	0	0	0	0	0	0	0	0
60 _ 69	0	0	0	0	0	0	0	0	0	0	0	0
70 _ 79	0	0	0	0	0	0	0	0	0	0	0	0
80 _ 89	0	0	0	0	0	0	0	0	0	0	0	0
90 _ 99	0	0	0	0	0	0	0	0	0	0	0	0
100 _ 109	0	0	0	0	0	0	0	0	0	0	0	0
110 _ 119	0	0	0	0	0	0	0	0	0	0	0	0
120 _ 129	0	0	0	0	0	0	0	0	0	0	0	0
130 _ 139	0	0	0	0	0	0	0	0	0	0	0	0
140 _ 149	0	0	0	0	0	0	0	0	0	0	0	0
150 _ 159	0	0	0	0	0	0	0	0	0	0	0	0
160 _ 169	0	0	0	0	0	0	0	0	0	0	0	0
170 _ 179	0	0	0	0	0	0	0	0	0	0	0	0
180 _ 189	0	0	0	0	0	0	0	0	0	0	0	0
190 _ 199	0	0	0	0	0	0	0	0	0	0	0	0
200 _ 209	0	0	0	0	0	0	0	0	0	0	0	0
210 _ 219	0	0	0	0	0	0	0	0	0	0	0	0
220 _ 229	0	0	0	0	0	0	0	0	0	0	0	0
230 _ 239	0	0	0	0	0	0	0	0	0	0	0	0
240 _ 249	0	0	0	0	0	0	0	0	0	0	0	0
250 _ 259	0	0	0	0	0	0	0	0	0	0	0	0
260 _ 269	0	0	0	0	0	0	0	0	0	0	0	0
270 _ 279	0	0	0	0	0	0	0	0	0	0	0	0
280 _ 289	0	0	0	0	0	0	0	0	0	0	0	0
290 _ 299	0	0	0	0	0	0	0	0	0	0	0	0

IHC0021 STOP 0 ***** RESTART AT LOCATION 10E342
EXECUTION TERMINATED

Table B-4

AVERAGE TEMPERATURE BY 10 M. LAYER

LATITUDE= 45 N LONGTITUDE=85 W 1962

INTERVAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 _ 9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10 _ 19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20 _ 29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30 _ 39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40 _ 49	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50 _ 59	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
60 _ 69	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70 _ 79	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80 _ 89	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90 _ 99	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

NUMBER OF BT"S USED TO COMPUTE AVER. TEMPERATURE

LATITUDE= 45 N LONGTITUDE=85 W 1962

INTERVAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 _ 9	0	0	0	0	0	0	0	0	0	0	0	0
10 _ 19	0	0	0	0	0	0	0	0	0	0	0	0
20 _ 29	0	0	0	0	0	0	0	0	0	0	0	0
30 _ 39	0	0	0	0	0	0	0	0	0	0	0	0
40 _ 49	0	0	0	0	0	0	0	0	0	0	0	0
50 _ 59	0	0	0	0	0	0	0	0	0	0	0	0
60 _ 69	0	0	0	0	0	0	0	0	0	0	0	0
70 _ 79	0	0	0	0	0	0	0	0	0	0	0	0
80 _ 89	0	0	0	0	0	0	0	0	0	0	0	0
90 _ 99	0	0	0	0	0	0	0	0	0	0	0	0

AVERAGE TEMPERATURE BY 10 M. LAYER

LATITUDE= 41 N LONGTITUDE=86 W 1962

INTERVAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 _ 9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10 _ 19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20 _ 29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30 _ 39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40 _ 49	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50 _ 59	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
60 _ 69	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70 _ 79	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80 _ 89	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90 _ 99	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

NUMBER OF BT"S USED TO COMPUTE AVER. TEMPERATURE

LATITUDE= 41 N LONGTITUDE=86 W 1962

INTERVAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 _ 9	0	0	0	0	0	0	0	0	0	0	0	0
10 _ 19	0	0	0	0	0	0	0	0	0	0	0	0
20 _ 29	0	0	0	0	0	0	0	0	0	0	0	0
30 _ 39	0	0	0	0	0	0	0	0	0	0	0	0
40 _ 49	0	0	0	0	0	0	0	0	0	0	0	0
50 _ 59	0	0	0	0	0	0	0	0	0	0	0	0
60 _ 69	0	0	0	0	0	0	0	0	0	0	0	0
70 _ 79	0	0	0	0	0	0	0	0	0	0	0	0
80 _ 89	0	0	0	0	0	0	0	0	0	0	0	0
90 _ 99	0	0	0	0	0	0	0	0	0	0	0	0

AVERAGE TEMPERATURE BY 10 M. LAYER

LATITUDE= 42 N LONGTITUDE=86 W 1962

INTERVAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 _ 9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	19.7	16.5	12.1	11.4	0.0
10 _ 19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	18.4	16.5	12.0	11.4	0.0
20 _ 29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.6	16.4	11.9	10.7	0.0
30 _ 39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.5	11.0	8.1	9.3	0.0
40 _ 49	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.7	5.5	4.3	8.8	0.0
50 _ 59	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.5	4.6	4.2	6.3	0.0
60 _ 69	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.5	4.5	4.1	5.0	0.0
70 _ 79	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.4	4.4	4.1	5.0	0.0
80 _ 89	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.4	4.4	4.0	5.0	0.0
90 _ 99	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.2	4.4	3.9	0.0	0.0
100 _ 109	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.6	4.3	3.9	0.0	0.0
110 _ 119	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0	4.3	3.9	0.0	0.0
120 _ 129	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0	4.2	0.0	0.0	0.0
130 _ 139	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.9	0.0	0.0	0.0	0.0
140 _ 149	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150 _ 159	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160 _ 169	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170 _ 179	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180 _ 189	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
190 _ 199	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

NUMBER OF BT"S USED TO COMPUTE AVER. TEMPERATURE

LATITUDE= 42 N LONGTITUDE=86 W 1962

INTERVAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 _ 9	0	0	0	0	0	0	0	10	1	2	1	0
10 _ 19	0	0	0	0	0	0	0	10	1	2	1	0
20 _ 29	0	0	0	0	0	0	0	10	1	2	1	0
30 _ 39	0	0	0	0	0	0	0	10	1	2	1	0
40 _ 49	0	0	0	0	0	0	0	10	1	2	1	0
50 _ 59	0	0	0	0	0	0	0	10	1	2	1	0
60 _ 69	0	0	0	0	0	0	0	8	1	2	1	0
70 _ 79	0	0	0	0	0	0	0	7	1	2	1	0
80 _ 89	0	0	0	0	0	0	0	7	1	2	1	0
90 _ 99	0	0	0	0	0	0	0	4	1	1	0	0
100 _ 109	0	0	0	0	0	0	0	2	1	1	0	0
110 _ 119	0	0	0	0	0	0	0	1	1	1	0	0
120 _ 129	0	0	0	0	0	0	0	1	1	0	0	0
130 _ 139	0	0	0	0	0	0	0	1	0	0	0	0
140 _ 149	0	0	0	0	0	0	0	0	0	0	0	0
150 _ 159	0	0	0	0	0	0	0	0	0	0	0	0
160 _ 169	0	0	0	0	0	0	0	0	0	0	0	0
170 _ 179	0	0	0	0	0	0	0	0	0	0	0	0
180 _ 189	0	0	0	0	0	0	0	0	0	0	0	0
190 _ 199	0	0	0	0	0	0	0	0	0	0	0	0

Table B-4 (Continued)

AVERAGE TEMPERATURE BY 10 M. LAYER

LATITUDE= 43 N LONGTITUDE=86 W 1962

INTERVAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 _ 9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.3	0.0	0.0	11.3	0.0
10 _ 19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.0	0.0
20 _ 29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.1	0.0
30 _ 39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.3	0.0
40 _ 49	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.5	0.0
50 _ 59	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.1	0.0
60 _ 69	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.7	0.0
70 _ 79	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.5	0.0
80 _ 89	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.4	0.0
90 _ 99	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.2	0.0
100 _ 109	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.1	0.0
110 _ 119	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0	0.0
120 _ 129	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130 _ 139	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140 _ 149	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150 _ 159	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160 _ 169	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170 _ 179	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180 _ 189	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
190 _ 199	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

NUMBER OF BT"S USED TO COMPUTE AVER. TEMPERATURE

LATITUDE= 43 N LONGTITUDE=86 W 1962

INTERVAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 _ 9	0	0	0	0	0	0	0	1	0	0	2	0
10 _ 19	0	0	0	0	0	0	0	0	0	0	2	0
20 _ 29	0	0	0	0	0	0	0	0	0	0	2	0
30 _ 39	0	0	0	0	0	0	0	0	0	0	2	0
40 _ 49	0	0	0	0	0	0	0	0	0	0	2	0
50 _ 59	0	0	0	0	0	0	0	0	0	0	2	0
60 _ 69	0	0	0	0	0	0	0	0	0	0	2	0
70 _ 79	0	0	0	0	0	0	0	0	0	0	2	0
80 _ 89	0	0	0	0	0	0	0	0	0	0	2	0
90 _ 99	0	0	0	0	0	0	0	0	0	0	2	0
100 _ 109	0	0	0	0	0	0	0	0	0	0	2	0
110 _ 119	0	0	0	0	0	0	0	0	0	0	1	0
120 _ 129	0	0	0	0	0	0	0	0	0	0	0	0
130 _ 139	0	0	0	0	0	0	0	0	0	0	0	0
140 _ 149	0	0	0	0	0	0	0	0	0	0	0	0
150 _ 159	0	0	0	0	0	0	0	0	0	0	0	0
160 _ 169	0	0	0	0	0	0	0	0	0	0	0	0
170 _ 179	0	0	0	0	0	0	0	0	0	0	0	0
180 _ 189	0	0	0	0	0	0	0	0	0	0	0	0
190 _ 199	0	0	0	0	0	0	0	0	0	0	0	0

AVERAGE TEMPERATURE BY 10 M. LAYER

LATITUDE= 44 N LONGTITUDE=86 W 1962

INTERVAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 _ 9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10 _ 19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20 _ 29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30 _ 39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40 _ 49	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50 _ 59	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
60 _ 69	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70 _ 79	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80 _ 89	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90 _ 99	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

NUMBER OF BT"S USED TO COMPUTE AVER. TEMPERATURE

LATITUDE= 44 N LONGTITUDE=86 W 1962

INTERVAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 _ 9	0	0	0	0	0	0	0	0	0	0	0	0
10 _ 19	0	0	0	0	0	0	0	0	0	0	0	0
20 _ 29	0	0	0	0	0	0	0	0	0	0	0	0
30 _ 39	0	0	0	0	0	0	0	0	0	0	0	0
40 _ 49	0	0	0	0	0	0	0	0	0	0	0	0
50 _ 59	0	0	0	0	0	0	0	0	0	0	0	0
60 _ 69	0	0	0	0	0	0	0	0	0	0	0	0
70 _ 79	0	0	0	0	0	0	0	0	0	0	0	0
80 _ 89	0	0	0	0	0	0	0	0	0	0	0	0
90 _ 99	0	0	0	0	0	0	0	0	0	0	0	0

AVERAGE TEMPERATURE BY 10 M. LAYER

LATITUDE= 45 N LONGTITUDE=86 W 1962

INTERVAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 _ 9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10 _ 19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20 _ 29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30 _ 39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40 _ 49	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50 _ 59	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
60 _ 69	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70 _ 79	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80 _ 89	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90 _ 99	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

NUMBER OF BT"S USED TO COMPUTE AVER. TEMPERATURE

LATITUDE= 45 N LONGTITUDE=86 W 1962

INTERVAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 _ 9	0	0	0	0	0	0	0	0	0	0	0	0
10 _ 19	0	0	0	0	0	0	0	0	0	0	0	0
20 _ 29	0	0	0	0	0	0	0	0	0	0	0	0
30 _ 39	0	0	0	0	0	0	0	0	0	0	0	0
40 _ 49	0	0	0	0	0	0	0	0	0	0	0	0
50 _ 59	0	0	0	0	0	0	0	0	0	0	0	0
60 _ 69	0	0	0	0	0	0	0	0	0	0	0	0
70 _ 79	0	0	0	0	0	0	0	0	0	0	0	0
80 _ 89	0	0	0	0	0	0	0	0	0	0	0	0
90 _ 99	0	0	0	0	0	0	0	0	0	0	0	0

Table B-4 (Continued)

AVERAGE TEMPERATURE BY 10 M. LAYER

LATITUDE= 41 N LONGTITUDE=87 W 1962

INTERVAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 _ 9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.5	17.5	14.1	0.0	0.0
10 _ 19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20 _ 29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30 _ 39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40 _ 49	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50 _ 59	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
60 _ 69	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70 _ 79	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80 _ 89	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90 _ 99	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

NUMBER OF BT"S USED TO COMPUTE AVER. TEMPERATURE

LATITUDE= 41 N LONGTITUDE=87 W 1962

INTERVAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 _ 9	0	0	0	0	0	0	0	2	2	1	0	0
10 _ 19	0	0	0	0	0	0	0	0	0	0	0	0
20 _ 29	0	0	0	0	0	0	0	0	0	0	0	0
30 _ 39	0	0	0	0	0	0	0	0	0	0	0	0
40 _ 49	0	0	0	0	0	0	0	0	0	0	0	0
50 _ 59	0	0	0	0	0	0	0	0	0	0	0	0
60 _ 69	0	0	0	0	0	0	0	0	0	0	0	0
70 _ 79	0	0	0	0	0	0	0	0	0	0	0	0
80 _ 89	0	0	0	0	0	0	0	0	0	0	0	0
90 _ 99	0	0	0	0	0	0	0	0	0	0	0	0

AVERAGE TEMPERATURE BY 10 M. LAYER

LATITUDE= 42 N LONGTITUDE=87 W 1962

INTERVAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 _ 9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21.6	17.9	14.2	8.3	0.0
10 _ 19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	19.0	17.9	14.2	8.4	0.0
20 _ 29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.7	17.0	13.9	8.4	0.0
30 _ 39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.3	5.8	9.7	8.4	0.0
40 _ 49	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0	5.4	7.0	8.4	0.0
50 _ 59	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.8	4.8	4.4	7.9	0.0
60 _ 69	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.7	4.8	4.3	5.9	0.0
70 _ 79	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.6	4.7	4.2	4.7	0.0
80 _ 89	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.6	4.6	4.1	4.4	0.0
90 _ 99	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.1	4.6	4.1	4.0	0.0

NUMBER OF BT"S USED TO COMPUTE AVER. TEMPERATURE

LATITUDE= 42 N LONGTITUDE=87 W 1962

INTERVAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 _ 9	0	0	0	0	0	0	0	10	2	2	3	0
10 _ 19	0	0	0	0	0	0	0	10	2	2	3	0
20 _ 29	0	0	0	0	0	0	0	10	2	2	3	0
30 _ 39	0	0	0	0	0	0	0	10	2	2	3	0
40 _ 49	0	0	0	0	0	0	0	10	2	2	3	0
50 _ 59	0	0	0	0	0	0	0	7	1	1	3	0
60 _ 69	0	0	0	0	0	0	0	6	1	1	3	0
70 _ 79	0	0	0	0	0	0	0	4	1	1	3	0
80 _ 89	0	0	0	0	0	0	0	4	1	1	3	0
90 _ 99	0	0	0	0	0	0	0	3	1	1	1	0

AVERAGE TEMPERATURE BY 10 M. LAYER

LATITUDE= 43 N LONGTITUDE=87 W 1962

INTERVAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 _ 9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.5	0.0
10 _ 19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.5	0.0
20 _ 29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.5	0.0
30 _ 39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.5	0.0
40 _ 49	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.6	0.0
50 _ 59	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.8	0.0
60 _ 69	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0	0.0
70 _ 79	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.9	0.0
80 _ 89	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.9	0.0
90 _ 99	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

NUMBER OF BT"S USED TO COMPUTE AVER. TEMPERATURE

LATITUDE= 43 N LONGTITUDE=87 W 1962

INTERVAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 _ 9	0	0	0	0	0	0	0	0	0	0	2	0
10 _ 19	0	0	0	0	0	0	0	0	0	0	2	0
20 _ 29	0	0	0	0	0	0	0	0	0	0	2	0
30 _ 39	0	0	0	0	0	0	0	0	0	0	2	0
40 _ 49	0	0	0	0	0	0	0	0	0	0	2	0
50 _ 59	0	0	0	0	0	0	0	0	0	0	2	0
60 _ 69	0	0	0	0	0	0	0	0	0	0	1	0
70 _ 79	0	0	0	0	0	0	0	0	0	0	1	0
80 _ 89	0	0	0	0	0	0	0	0	0	0	1	0
90 _ 99	0	0	0	0	0	0	0	0	0	0	0	0

AVERAGE TEMPERATURE BY 10 M. LAYER

LATITUDE= 44 N LONGTITUDE=87 W 1962

INTERVAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 _ 9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10 _ 19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20 _ 29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30 _ 39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40 _ 49	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50 _ 59	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
60 _ 69	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70 _ 79	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80 _ 89	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90 _ 99	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

NUMBER OF BT"S USED TO COMPUTE AVER. TEMPERATURE

LATITUDE= 44 N LONGTITUDE=87 W 1962

INTERVAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 _ 9	0	0	0	0	0	0	0	0	0	0	0	0
10 _ 19	0	0	0	0	0	0	0	0	0	0	0	0
20 _ 29	0	0	0	0	0	0	0	0	0	0	0	0
30 _ 39	0	0	0	0	0	0	0	0	0	0	0	0
40 _ 49	0	0	0	0	0	0	0	0	0	0	0	0
50 _ 59	0	0	0	0	0	0	0	0	0	0	0	0
60 _ 69	0	0	0	0	0	0	0	0	0	0	0	0
70 _ 79	0	0	0	0	0	0	0	0	0	0	0	0
80 _ 89	0	0	0	0	0	0	0	0	0	0	0	0
90 _ 99	0	0	0	0	0	0	0	0	0	0	0	0

Table B-4 (Concluded)

AVERAGE TEMPERATURE BY 10 M. LAYER

LATITUDE= 45 N LONGTITUDE=87 W 1962

INTERVAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 _ 9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10 _ 19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20 _ 29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30 _ 39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40 _ 49	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50 _ 59	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
60 _ 69	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70 _ 79	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80 _ 89	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90 _ 99	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

NUMBER OF BT"S USED TO COMPUTE AVER. TEMPERATURE

LATITUDE= 45 N LONGTITUDE=87 W 1962

INTERVAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 _ 9	0	0	0	0	0	0	0	0	0	0	0	0
10 _ 19	0	0	0	0	0	0	0	0	0	0	0	0
20 _ 29	0	0	0	0	0	0	0	0	0	0	0	0
30 _ 39	0	0	0	0	0	0	0	0	0	0	0	0
40 _ 49	0	0	0	0	0	0	0	0	0	0	0	0
50 _ 59	0	0	0	0	0	0	0	0	0	0	0	0
60 _ 69	0	0	0	0	0	0	0	0	0	0	0	0
70 _ 79	0	0	0	0	0	0	0	0	0	0	0	0
80 _ 89	0	0	0	0	0	0	0	0	0	0	0	0
90 _ 99	0	0	0	0	0	0	0	0	0	0	0	0

Table B-5

AVERAGE TEMPERATURE BY 10 M. LAYER

LATITUDE= 45 N LONGTITUDE=85 W 1967

INTERVAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 _ 9	0.0	0.0	0.0	0.0	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10 _ 19	0.0	0.0	0.0	0.0	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20 _ 29	0.0	0.0	0.0	0.0	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30 _ 39	0.0	0.0	0.0	0.0	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40 _ 49	0.0	0.0	0.0	0.0	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50 _ 59	0.0	0.0	0.0	0.0	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
60 _ 69	0.0	0.0	0.0	0.0	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70 _ 79	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80 _ 89	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90 _ 99	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

NUMBER OF BT"S USED TO COMPUTE AVER. TEMPERATURE

LATITUDE= 45 N LONGTITUDE=85 W 1967

INTERVAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 _ 9	0	0	0	0	1	0	0	0	0	0	0	0
10 _ 19	0	0	0	0	1	0	0	0	0	0	0	0
20 _ 29	0	0	0	0	1	0	0	0	0	0	0	0
30 _ 39	0	0	0	0	1	0	0	0	0	0	0	0
40 _ 49	0	0	0	0	1	0	0	0	0	0	0	0
50 _ 59	0	0	0	0	1	0	0	0	0	0	0	0
60 _ 69	0	0	0	0	1	0	0	0	0	0	0	0
70 _ 79	0	0	0	0	0	0	0	0	0	0	0	0
80 _ 89	0	0	0	0	0	0	0	0	0	0	0	0
90 _ 99	0	0	0	0	0	0	0	0	0	0	0	0

AVERAGE TEMPERATURE BY 10 M. LAYER

LATITUDE= 41 N LONGTITUDE=86 W 1967

INTERVAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 _ 9	0.0	0.0	0.0	0.0	7.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10 _ 19	0.0	0.0	0.0	0.0	6.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20 _ 29	0.0	0.0	0.0	0.0	5.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30 _ 39	0.0	0.0	0.0	0.0	5.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40 _ 49	0.0	0.0	0.0	0.0	4.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50 _ 59	0.0	0.0	0.0	0.0	3.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
60 _ 69	0.0	0.0	0.0	0.0	3.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70 _ 79	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80 _ 89	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90 _ 99	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

NUMBER OF BT"S USED TO COMPUTE AVER. TEMPERATURE

LATITUDE= 41 N LONGTITUDE=86 W 1967

INTERVAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 _ 9	0	0	0	0	4	0	0	0	0	0	0	0
10 _ 19	0	0	0	0	3	0	0	0	0	0	0	0
20 _ 29	0	0	0	0	3	0	0	0	0	0	0	0
30 _ 39	0	0	0	0	3	0	0	0	0	0	0	0
40 _ 49	0	0	0	0	2	0	0	0	0	0	0	0
50 _ 59	0	0	0	0	1	0	0	0	0	0	0	0
60 _ 69	0	0	0	0	1	0	0	0	0	0	0	0
70 _ 79	0	0	0	0	0	0	0	0	0	0	0	0
80 _ 89	0	0	0	0	0	0	0	0	0	0	0	0
90 _ 99	0	0	0	0	0	0	0	0	0	0	0	0

AVERAGE TEMPERATURE BY 10 M. LAYER

LATITUDE= 42 N LONGTITUDE=86 W 1967

INTERVAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 _ 9	0.0	0.0	1.6	3.7	4.7	11.3	16.8	0.0	0.0	15.4	10.1	0.0
10 _ 19	0.0	0.0	1.7	3.7	4.8	8.0	11.0	0.0	0.0	11.8	10.1	0.0
20 _ 29	0.0	0.0	1.7	3.2	4.1	5.5	6.4	0.0	0.0	7.0	10.3	0.0
30 _ 39	0.0	0.0	1.8	2.9	3.8	4.9	5.0	0.0	0.0	5.2	10.0	0.0
40 _ 49	0.0	0.0	2.2	2.9	3.8	4.6	4.7	0.0	0.0	4.7	7.7	0.0
50 _ 59	0.0	0.0	2.1	2.9	3.5	4.4	4.7	0.0	0.0	4.5	5.7	0.0
60 _ 69	0.0	0.0	2.2	2.7	3.6	4.4	4.6	0.0	0.0	4.4	4.6	0.0
70 _ 79	0.0	0.0	2.3	2.8	3.5	4.4	4.4	0.0	0.0	4.3	4.5	0.0
80 _ 89	0.0	0.0	0.0	2.8	3.3	4.3	4.3	0.0	0.0	0.0	4.4	0.0
90 _ 99	0.0	0.0	0.0	2.8	3.3	4.3	4.3	0.0	0.0	0.0	4.3	0.0
100 _ 109	0.0	0.0	0.0	2.8	3.3	4.3	4.1	0.0	0.0	0.0	4.2	0.0
110 _ 119	0.0	0.0	0.0	2.8	3.3	4.3	4.1	0.0	0.0	0.0	4.1	0.0
120 _ 129	0.0	0.0	0.0	2.8	3.3	4.2	4.1	0.0	0.0	0.0	4.1	0.0
130 _ 139	0.0	0.0	0.0	2.8	3.3	4.2	4.1	0.0	0.0	0.0	4.1	0.0
140 _ 149	0.0	0.0	0.0	2.8	3.3	4.1	4.1	0.0	0.0	0.0	4.0	0.0
150 _ 159	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160 _ 169	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170 _ 179	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180 _ 189	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
190 _ 199	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

NUMBER OF BT"S USED TO COMPUTE AVER. TEMPERATURE

LATITUDE= 42 N LONGTITUDE=86 W 1967

INTERVAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 _ 9	0	0	5	8	12	7	9	0	0	2	4	0
10 _ 19	0	0	4	8	11	7	8	0	0	1	4	0
20 _ 29	0	0	4	6	10	5	6	0	0	3	3	0
30 _ 39	0	0	4	4	9	5	6	0	0	2	2	0
40 _ 49	0	0	3	4	9	5	6	0	0	1	2	0
50 _ 59	0	0	2	4	7	3	4	0	0	1	2	0
60 _ 69	0	0	2	3	5	3	3	0	0	1	1	0
70 _ 79	0	0	2	2	3	2	2	0	0	1	1	0
80 _ 89	0	0	0	2	2	2	2	0	0	0	1	0
90 _ 99	0	0	0	1	2	2	2	0	0	0	1	0
100 _ 109	0	0	0	1	2	1	1	0	0	0	1	0
110 _ 119	0	0	0	1	2	1	1	0	0	0	1	0
120 _ 129	0	0	0	1	2	1	1	0	0	0	1	0
130 _ 139	0	0	0	1	2	1	1	0	0	0	1	0
140 _ 149	0	0	0	1	2	1	1	0	0	0	1	0
150 _ 159	0	0	0	0	0	0	0	0	0	0	0	0
160 _ 169	0	0	0	0	0	0	0	0	0	0	0	0
170 _ 179	0	0	0	0	0	0	0	0	0	0	0	0
180 _ 189	0	0	0	0	0	0	0	0	0	0	0	0
190 _ 199	0	0	0	0	0	0	0	0	0	0	0	0

Table B-5 (Continued)

AVERAGE TEMPERATURE BY 10 M. LAYER

LATITUDE= 43 N LONGITUDE=86 W 1967

INTERVAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 _ 9	1.2	0.0	0.0	5.4	6.9	14.4	0.0	0.0	0.0	0.0	0.0	0.0
10 _ 19	1.4	0.0	0.0	5.0	5.8	8.9	0.0	0.0	0.0	0.0	0.0	0.0
20 _ 29	1.6	0.0	0.0	5.6	5.0	6.3	0.0	0.0	0.0	0.0	0.0	0.0
30 _ 39	0.0	0.0	0.0	7.1	4.9	5.3	0.0	0.0	0.0	0.0	0.0	0.0
40 _ 49	0.0	0.0	0.0	7.2	4.7	3.0	0.0	0.0	0.0	0.0	0.0	0.0
50 _ 59	0.0	0.0	0.0	7.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
60 _ 69	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70 _ 79	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80 _ 89	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90 _ 99	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

NUMBER OF BT"S USED TO COMPUTE AVER. TEMPERATURE

LATITUDE= 43 N LONGITUDE=86 W 1967

INTERVAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 _ 9	1	0	0	7	2	14	0	0	0	0	0	0
10 _ 19	1	0	0	6	2	7	0	0	0	0	0	0
20 _ 29	1	0	0	4	1	2	0	0	0	0	0	0
30 _ 39	0	0	0	1	1	1	0	0	0	0	0	0
40 _ 49	0	0	0	1	1	0	0	0	0	0	0	0
50 _ 59	0	0	0	1	0	0	0	0	0	0	0	0
60 _ 69	0	0	0	0	0	0	0	0	0	0	0	0
70 _ 79	0	0	0	0	0	0	0	0	0	0	0	0
80 _ 89	0	0	0	0	0	0	0	0	0	0	0	0
90 _ 99	0	0	0	0	0	0	0	0	0	0	0	0

AVERAGE TEMPERATURE BY 10 M. LAYER

LATITUDE= 44 N LONGITUDE=86 W 1967

INTERVAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 _ 9	0.0	0.0	0.0	2.4	3.5	6.1	10.8	0.0	0.0	0.0	0.0	0.0
10 _ 19	0.0	0.0	0.0	2.4	3.3	5.6	7.0	0.0	0.0	0.0	0.0	0.0
20 _ 29	0.0	0.0	0.0	2.4	3.2	5.1	5.1	0.0	0.0	0.0	0.0	0.0
30 _ 39	0.0	0.0	0.0	2.4	3.2	4.6	4.5	0.0	0.0	0.0	0.0	0.0
40 _ 49	0.0	0.0	0.0	2.3	3.0	3.6	4.4	0.0	0.0	0.0	0.0	0.0
50 _ 59	0.0	0.0	0.0	2.3	3.0	3.5	4.3	0.0	0.0	0.0	0.0	0.0
60 _ 69	0.0	0.0	0.0	2.3	3.0	3.5	4.3	0.0	0.0	0.0	0.0	0.0
70 _ 79	0.0	0.0	0.0	2.3	3.0	3.5	4.3	0.0	0.0	0.0	0.0	0.0
80 _ 89	0.0	0.0	0.0	2.3	3.0	3.5	4.3	0.0	0.0	0.0	0.0	0.0
90 _ 99	0.0	0.0	0.0	2.3	3.0	3.5	4.3	0.0	0.0	0.0	0.0	0.0
100 _ 109	0.0	0.0	0.0	2.3	3.0	3.5	4.3	0.0	0.0	0.0	0.0	0.0
110 _ 119	0.0	0.0	0.0	2.4	3.0	3.5	4.3	0.0	0.0	0.0	0.0	0.0
120 _ 129	0.0	0.0	0.0	2.4	3.0	3.5	4.3	0.0	0.0	0.0	0.0	0.0
130 _ 139	0.0	0.0	0.0	2.4	3.0	3.5	4.3	0.0	0.0	0.0	0.0	0.0
140 _ 149	0.0	0.0	0.0	2.5	3.0	3.5	4.3	0.0	0.0	0.0	0.0	0.0
150 _ 159	0.0	0.0	0.0	2.5	3.0	3.5	4.3	0.0	0.0	0.0	0.0	0.0
160 _ 169	0.0	0.0	0.0	2.6	3.0	3.5	4.3	0.0	0.0	0.0	0.0	0.0
170 _ 179	0.0	0.0	0.0	2.7	3.0	3.5	4.3	0.0	0.0	0.0	0.0	0.0
180 _ 189	0.0	0.0	0.0	2.7	3.1	3.5	4.3	0.0	0.0	0.0	0.0	0.0
190 _ 199	0.0	0.0	0.0	2.9	3.1	3.5	4.3	0.0	0.0	0.0	0.0	0.0
200 _ 209	0.0	0.0	0.0	2.9	3.0	0.0	4.0	0.0	0.0	0.0	0.0	0.0
210 _ 219	0.0	0.0	0.0	3.1	3.0	0.0	4.0	0.0	0.0	0.0	0.0	0.0
220 _ 229	0.0	0.0	0.0	3.1	3.1	0.0	4.0	0.0	0.0	0.0	0.0	0.0
230 _ 239	0.0	0.0	0.0	3.1	3.2	0.0	3.7	0.0	0.0	0.0	0.0	0.0
240 _ 249	0.0	0.0	0.0	3.2	3.2	0.0	3.4	0.0	0.0	0.0	0.0	0.0
250 _ 259	0.0	0.0	0.0	3.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
260 _ 269	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
270 _ 279	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
280 _ 289	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
290 _ 299	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

NUMBER OF BT"S USED TO COMPUTE AVER. TEMPERATURE

LATITUDE= 44 N LONGITUDE=86 W 1967

INTERVAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 _ 9	0	0	0	4	6	4	3	0	0	0	0	0
10 _ 19	0	0	0	4	6	4	3	0	0	0	0	0
20 _ 29	0	0	0	4	6	4	3	0	0	0	0	0
30 _ 39	0	0	0	4	6	4	3	0	0	0	0	0
40 _ 49	0	0	0	3	5	4	3	0	0	0	0	0
50 _ 59	0	0	0	3	5	3	3	0	0	0	0	0
60 _ 69	0	0	0	3	5	3	3	0	0	0	0	0
70 _ 79	0	0	0	3	5	3	3	0	0	0	0	0
80 _ 89	0	0	0	3	5	3	3	0	0	0	0	0
90 _ 99	0	0	0	3	5	3	3	0	0	0	0	0
100 _ 109	0	0	0	3	5	3	3	0	0	0	0	0
110 _ 119	0	0	0	3	5	3	3	0	0	0	0	0
120 _ 129	0	0	0	3	5	3	3	0	0	0	0	0
130 _ 139	0	0	0	3	5	3	3	0	0	0	0	0
140 _ 149	0	0	0	3	5	3	3	0	0	0	0	0
150 _ 159	0	0	0	3	5	3	3	0	0	0	0	0
160 _ 169	0	0	0	3	5	3	3	0	0	0	0	0
170 _ 179	0	0	0	3	5	3	3	0	0	0	0	0
180 _ 189	0	0	0	3	5	3	3	0	0	0	0	0
190 _ 199	0	0	0	2	5	3	3	0	0	0	0	0
200 _ 209	0	0	0	2	2	0	2	0	0	0	0	0
210 _ 219	0	0	0	1	2	0	2	0	0	0	0	0
220 _ 229	0	0	0	1	2	0	2	0	0	0	0	0
230 _ 239	0	0	0	1	2	0	1	0	0	0	0	0
240 _ 249	0	0	0	1	2	0	1	0	0	0	0	0
250 _ 259	0	0	0	1	0	0	0	0	0	0	0	0
260 _ 269	0	0	0	0	0	0	0	0	0	0	0	0
270 _ 279	0	0	0	0	0	0	0	0	0	0	0	0
280 _ 289	0	0	0	0	0	0	0	0	0	0	0	0
290 _ 299	0	0	0	0	0	0	0	0	0	0	0	0

Table B-5 (Continued)

AVERAGE TEMPERATURE BY 10 M. LAYER

LATITUDE= 45 N LONGTITUDE=86 W 1967

INTERVAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 _ 9	0.0	0.0	0.0	0.0	0.0	0.0	16.0	0.0	0.0	0.0	0.0	0.0
10 _ 19	0.0	0.0	0.0	0.0	0.0	0.0	13.8	0.0	0.0	0.0	0.0	0.0
20 _ 29	0.0	0.0	0.0	0.0	0.0	0.0	9.0	0.0	0.0	0.0	0.0	0.0
30 _ 39	0.0	0.0	0.0	0.0	0.0	0.0	7.1	0.0	0.0	0.0	0.0	0.0
40 _ 49	0.0	0.0	0.0	0.0	0.0	0.0	6.0	0.0	0.0	0.0	0.0	0.0
50 _ 59	0.0	0.0	0.0	0.0	0.0	0.0	5.4	0.0	0.0	0.0	0.0	0.0
60 _ 69	0.0	0.0	0.0	0.0	0.0	0.0	5.1	0.0	0.0	0.0	0.0	0.0
70 _ 79	0.0	0.0	0.0	0.0	0.0	0.0	5.0	0.0	0.0	0.0	0.0	0.0
80 _ 89	0.0	0.0	0.0	0.0	0.0	0.0	4.8	0.0	0.0	0.0	0.0	0.0
90 _ 99	0.0	0.0	0.0	0.0	0.0	0.0	4.8	0.0	0.0	0.0	0.0	0.0
100 _ 109	0.0	0.0	0.0	0.0	0.0	0.0	4.8	0.0	0.0	0.0	0.0	0.0
110 _ 119	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120 _ 129	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130 _ 139	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140 _ 149	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150 _ 159	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160 _ 169	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170 _ 179	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180 _ 189	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
190 _ 199	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

NUMBER OF BT"S USED TO COMPUTE AVER. TEMPERATURE

LATITUDE= 45 N LONGTITUDE=86 W 1967

INTERVAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 _ 9	0	0	0	0	0	0	1	0	0	0	0	0
10 _ 19	0	0	0	0	0	0	1	0	0	0	0	0
20 _ 29	0	0	0	0	0	0	1	0	0	0	0	0
30 _ 39	0	0	0	0	0	0	1	0	0	0	0	0
40 _ 49	0	0	0	0	0	0	1	0	0	0	0	0
50 _ 59	0	0	0	0	0	0	1	0	0	0	0	0
60 _ 69	0	0	0	0	0	0	1	0	0	0	0	0
70 _ 79	0	0	0	0	0	0	1	0	0	0	0	0
80 _ 89	0	0	0	0	0	0	1	0	0	0	0	0
90 _ 99	0	0	0	0	0	0	1	0	0	0	0	0
100 _ 109	0	0	0	0	0	0	1	0	0	0	0	0
110 _ 119	0	0	0	0	0	0	0	0	0	0	0	0
120 _ 129	0	0	0	0	0	0	0	0	0	0	0	0
130 _ 139	0	0	0	0	0	0	0	0	0	0	0	0
140 _ 149	0	0	0	0	0	0	0	0	0	0	0	0
150 _ 159	0	0	0	0	0	0	0	0	0	0	0	0
160 _ 169	0	0	0	0	0	0	0	0	0	0	0	0
170 _ 179	0	0	0	0	0	0	0	0	0	0	0	0
180 _ 189	0	0	0	0	0	0	0	0	0	0	0	0
190 _ 199	0	0	0	0	0	0	0	0	0	0	0	0

AVERAGE TEMPERATURE BY 10 M. LAYER

LATITUDE= 41 N LONGTITUDE=87 W 1967

INTERVAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 _ 9	0.0	0.0	0.0	5.0	7.4	13.5	16.4	0.0	0.0	0.0	0.0	0.0
10 _ 19	0.0	0.0	0.0	3.5	6.5	7.0	9.9	0.0	0.0	0.0	0.0	0.0
20 _ 29	0.0	0.0	0.0	3.5	5.1	6.4	10.6	0.0	0.0	0.0	0.0	0.0
30 _ 39	0.0	0.0	0.0	3.5	5.1	5.8	7.1	0.0	0.0	0.0	0.0	0.0
40 _ 49	0.0	0.0	0.0	0.0	5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50 _ 59	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
60 _ 69	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70 _ 79	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80 _ 89	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90 _ 99	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

NUMBER OF BT"S USED TO COMPUTE AVER. TEMPERATURE

LATITUDE= 41 N LONGTITUDE=87 W 1967

INTERVAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 _ 9	0	0	0	2	14	2	2	0	0	0	0	0
10 _ 19	0	0	0	1	10	1	2	0	0	0	0	0
20 _ 29	0	0	0	1	5	1	1	0	0	0	0	0
30 _ 39	0	0	0	1	3	1	1	0	0	0	0	0
40 _ 49	0	0	0	0	1	0	0	0	0	0	0	0
50 _ 59	0	0	0	0	0	0	0	0	0	0	0	0
60 _ 69	0	0	0	0	0	0	0	0	0	0	0	0
70 _ 79	0	0	0	0	0	0	0	0	0	0	0	0
80 _ 89	0	0	0	0	0	0	0	0	0	0	0	0
90 _ 99	0	0	0	0	0	0	0	0	0	0	0	0

AVERAGE TEMPERATURE BY 10 M. LAYER

LATITUDE= 42 N LONGTITUDE=87 W 1967

INTERVAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 _ 9	0.0	0.0	2.0	2.6	4.0	10.0	16.1	0.0	0.0	0.0	11.0	4.0
10 _ 19	0.0	0.0	2.1	2.6	4.6	7.9	11.7	0.0	0.0	0.0	10.9	4.0
20 _ 29	0.0	0.0	2.2	2.6	4.6	5.6	6.3	0.0	0.0	0.0	9.4	4.2
30 _ 39	0.0	0.0	2.4	2.6	4.3	5.0	4.8	0.0	0.0	0.0	6.5	4.3
40 _ 49	0.0	0.0	2.4	2.6	4.2	4.9	4.5	0.0	0.0	0.0	5.7	4.3
50 _ 59	0.0	0.0	2.4	2.8	4.5	4.6	4.7	0.0	0.0	0.0	5.4	4.3
60 _ 69	0.0	0.0	2.4	2.8	4.5	4.5	4.6	0.0	0.0	0.0	0.0	0.0
70 _ 79	0.0	0.0	2.5	2.2	4.0	4.3	4.0	0.0	0.0	0.0	0.0	0.0
80 _ 89	0.0	0.0	2.6	2.2	4.0	4.9	3.9	0.0	0.0	0.0	0.0	0.0
90 _ 99	0.0	0.0	0.0	0.0	4.0	4.8	0.0	0.0	0.0	0.0	0.0	0.0

NUMBER OF BT"S USED TO COMPUTE AVER. TEMPERATURE

LATITUDE= 42 N LONGTITUDE=87 W 1967

INTERVAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 _ 9	0	0	2	3	7	4	3	0	0	0	1	7
10 _ 19	0	0	2	3	6	4	3	0	0	0	1	6
20 _ 29	0	0	2	3	6	4	3	0	0	0	1	3
30 _ 39	0	0	1	3	5	4	3	0	0	0	1	3
40 _ 49	0	0	1	3	5	4	3	0	0	0	1	3
50 _ 59	0	0	1	2	4	3	2	0	0	0	1	3
60 _ 69	0	0	1	2	4	3	2	0	0	0	0	0
70 _ 79	0	0	1	1	1	2	1	0	0	0	0	0
80 _ 89	0	0	1	1	1	1	1	0	0	0	0	0
90 _ 99	0	0	0	0	1	1	0	0	0	0	0	0

Table B-5 (Concluded)

AVERAGE TEMPERATURE BY 10 M. LAYER

LATITUDE= 43 N LONGTITUDE=87 W 1967

INTERVAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 _ 9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.5	0.0	0.0	0.0	0.0
10 _ 19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.3	0.0	0.0	0.0	0.0
20 _ 29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.1	0.0	0.0	0.0	0.0
30 _ 39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.4	0.0	0.0	0.0	0.0
40 _ 49	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0	0.0	0.0	0.0	0.0
50 _ 59	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0	0.0	0.0	0.0	0.0
60 _ 69	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0	0.0	0.0	0.0	0.0
70 _ 79	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0	0.0	0.0	0.0	0.0
80 _ 89	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90 _ 99	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

NUMBER OF BT"S USED TO COMPUTE AVER. TEMPERATURE

LATITUDE= 43 N LONGTITUDE=87 W 1967

INTERVAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 _ 9	0	0	0	0	0	0	0	1	0	0	0	0
10 _ 19	0	0	0	0	0	0	0	1	0	0	0	0
20 _ 29	0	0	0	0	0	0	0	1	0	0	0	0
30 _ 39	0	0	0	0	0	0	0	1	0	0	0	0
40 _ 49	0	0	0	0	0	0	0	1	0	0	0	0
50 _ 59	0	0	0	0	0	0	0	1	0	0	0	0
60 _ 69	0	0	0	0	0	0	0	1	0	0	0	0
70 _ 79	0	0	0	0	0	0	0	1	0	0	0	0
80 _ 89	0	0	0	0	0	0	0	0	0	0	0	0
90 _ 99	0	0	0	0	0	0	0	0	0	0	0	0

AVERAGE TEMPERATURE BY 10 M. LAYER

LATITUDE= 44 N LONGTITUDE=87 W 1967

INTERVAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 _ 9	0.0	0.0	0.0	3.0	3.8	5.8	13.9	0.0	0.0	0.0	0.0	0.0
10 _ 19	0.0	0.0	0.0	3.0	3.8	3.2	10.2	0.0	0.0	0.0	0.0	0.0
20 _ 29	0.0	0.0	0.0	3.0	3.7	3.3	9.0	0.0	0.0	0.0	0.0	0.0
30 _ 39	0.0	0.0	0.0	2.0	3.7	3.2	5.7	0.0	0.0	0.0	0.0	0.0
40 _ 49	0.0	0.0	0.0	2.0	2.5	3.1	4.2	0.0	0.0	0.0	0.0	0.0
50 _ 59	0.0	0.0	0.0	2.0	2.5	3.1	4.2	0.0	0.0	0.0	0.0	0.0
60 _ 69	0.0	0.0	0.0	2.0	2.5	3.1	4.1	0.0	0.0	0.0	0.0	0.0
70 _ 79	0.0	0.0	0.0	2.0	2.5	3.1	4.1	0.0	0.0	0.0	0.0	0.0
80 _ 89	0.0	0.0	0.0	2.0	2.5	3.1	4.1	0.0	0.0	0.0	0.0	0.0
90 _ 99	0.0	0.0	0.0	2.0	2.5	3.1	4.1	0.0	0.0	0.0	0.0	0.0
100 _ 109	0.0	0.0	0.0	2.0	2.5	3.1	4.1	0.0	0.0	0.0	0.0	0.0
110 _ 119	0.0	0.0	0.0	2.0	2.5	3.1	4.0	0.0	0.0	0.0	0.0	0.0
120 _ 129	0.0	0.0	0.0	2.3	2.7	3.1	4.0	0.0	0.0	0.0	0.0	0.0
130 _ 139	0.0	0.0	0.0	2.6	2.7	3.1	4.0	0.0	0.0	0.0	0.0	0.0
140 _ 149	0.0	0.0	0.0	2.7	2.8	3.2	4.0	0.0	0.0	0.0	0.0	0.0
150 _ 159	0.0	0.0	0.0	2.8	2.8	3.2	4.0	0.0	0.0	0.0	0.0	0.0
160 _ 169	0.0	0.0	0.0	2.9	2.9	3.2	3.9	0.0	0.0	0.0	0.0	0.0
170 _ 179	0.0	0.0	0.0	0.0	2.8	0.0	3.9	0.0	0.0	0.0	0.0	0.0
180 _ 189	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
190 _ 199	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

NUMBER OF BT"S USED TO COMPUTE AVER. TEMPERATURE

LATITUDE= 44 N LONGTITUDE=87 W 1967

INTERVAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 _ 9	0	0	0	2	3	2	2	0	0	0	0	0
10 _ 19	0	0	0	2	3	1	2	0	0	0	0	0
20 _ 29	0	0	0	2	3	2	2	0	0	0	0	0
30 _ 39	0	0	0	1	3	1	2	0	0	0	0	0
40 _ 49	0	0	0	1	2	1	1	0	0	0	0	0
50 _ 59	0	0	0	1	2	1	1	0	0	0	0	0
60 _ 69	0	0	0	1	2	1	1	0	0	0	0	0
70 _ 79	0	0	0	1	2	1	1	0	0	0	0	0
80 _ 89	0	0	0	1	2	1	1	0	0	0	0	0
90 _ 99	0	0	0	1	2	1	1	0	0	0	0	0
100 _ 109	0	0	0	1	2	1	1	0	0	0	0	0
110 _ 119	0	0	0	1	2	1	1	0	0	0	0	0
120 _ 129	0	0	0	1	2	1	1	0	0	0	0	0
130 _ 139	0	0	0	1	2	1	1	0	0	0	0	0
140 _ 149	0	0	0	1	2	1	1	0	0	0	0	0
150 _ 159	0	0	0	1	2	1	1	0	0	0	0	0
160 _ 169	0	0	0	1	2	1	1	0	0	0	0	0
170 _ 179	0	0	0	0	1	0	1	0	0	0	0	0
180 _ 189	0	0	0	0	0	0	0	0	0	0	0	0
190 _ 199	0	0	0	0	0	0	0	0	0	0	0	0

AVERAGE TEMPERATURE BY 10 M. LAYER

LATITUDE= 45 N LONGTITUDE=87 W 1967

INTERVAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 _ 9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10 _ 19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20 _ 29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30 _ 39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40 _ 49	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50 _ 59	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
60 _ 69	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70 _ 79	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80 _ 89	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90 _ 99	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

NUMBER OF BT"S USED TO COMPUTE AVER. TEMPERATURE

LATITUDE= 45 N LONGTITUDE=87 W 1967

INTERVAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0 _ 9	0	0	0	0	0	0	0	0	0	0	0	0
10 _ 19	0	0	0	0	0	0	0	0	0	0	0	0
20 _ 29	0	0	0	0	0	0	0	0	0	0	0	0
30 _ 39	0	0	0	0	0	0	0	0	0	0	0	0
40 _ 49	0	0	0	0	0	0	0	0	0	0	0	0
50 _ 59	0	0	0	0	0	0	0	0	0	0	0	0
60 _ 69	0	0	0	0	0	0	0	0	0	0	0	0
70 _ 79	0	0	0	0	0	0	0	0	0	0	0	0
80 _ 89	0	0	0	0	0	0	0	0	0	0	0	0
90 _ 99	0	0	0	0	0	0	0	0	0	0	0	0

APPENDIX C: LAKE MICHIGAN THERMOCLINE

The following program has been developed to objectively define the thermocline depth for individual BT casts. The program inspects each BT cast, determines the upper and lower boundary layer temperatures and depths for the thermocline, and defines the depth of maximum temperature gradient as the thermocline "mean." BT casts having only two reported readings, and casts with less than 1.0°C total temperature change are defined as isothermal. In cases of complex temperature structures, two or more boundary layers (thermocline layers) may be defined.

THERMOCLINE PROGRAM

```
FORTRAN IV G COMPILER       MAIN        07-22-68        18:54:13        PAGE 0001

      C     THIS IS A LATITUDE BY LATITUDE MONTHLY MEAN THERMOCLINE PROGRAM
            IMPLICIT INTEGER*4 (C,Y)
            INTEGER*4 SLNO
            INTEGER*2 MON, MO, LMON, LAT
            DIMENSION LD(30),LDT(30),LAT(5),MON(12),DEP(30),TEM(30),DELP(30),
           1DELT(30),THEMT(5,300),DEPTP(5,300),THEMB(5,300),DEPBM(5,300),
           2THTEM(5,300),DEPTH(5,300),ATHEMT(5),ATHEMB(5),ATHTEM(5),ADEPTP(5),
           3ADEPBM(5),ADEPTH(5),NL(5)
            DATA LAT/41,42,43,44,45/, MON/'JA','FE','MA','AP','MY','JU','JL',
           1'AU','SP','OC','NO','DC'/
            DATA THEMT/1500*0.0/,DEPTP/1500*0.0/,DEPBM/1500*0.0/,
           1THEMB/1500*0.0/,THTEM/1500*0.0/,DEPTH/1500*0.0/
      501   FORMAT (T4,I2,T9,I2,T17,A2,T19,I2,T26,I4,T36,I1,I1,T39,14I3)
      502   FORMAT (T20, 'CARDS NOT IN ORDER AT ',T45, I4)
      503   FORMAT (T20, 'DOUBLE THERMOCLINE FOR BT ',T47,I4)
      504   FORMAT (T20, 'THE SECOND THERMOCLINE AT ',T47,F5.0,5X,F5.1)
      505   FORMAT (1H0,T20, 'BT',T24,I4,T30, 'THERMOCLINE DATA ')
      506   FORMAT (T20, 'UPPER', T28,F5.0,5X,F5.1)
      507   FORMAT (T20, 'LOWER',T28,F5.0,5X,F5.1)
      508   FORMAT (T20, 'MEAN', T28,F5.0,5X,F5.1)
      509   FORMAT (T20, 'BT', T25,I4, T30, ' IS AN ISOTHERMAL  BT ')
      510   FORMAT (1H1,T15, 'TOTAL BT FOR',T30, A2,T35,I2,T40, 'IS',T45,I3)
      511   FORMAT (T15, 'AVERAGE THERMOCLINE DATA FOLLOW' )
      512   FORMAT (T15, 'LATITUDE 4',T25,I1,T28, 'NUMBER OF BT ',T42,I3)
      513   FORMAT (T15, 'DISCONTINUITY LAYER, UPPER: ',T45,F5.0,5X,F5.1)
      514   FORMAT (T35, 'LOWER', T45,F5.0,5X,F5.1)
      515   FORMAT (T26, 'THE THERMOCLINE IS', T45,F5.0,5X,F5.1)
      516   FORMAT ( '0', T25 '._._._._._._._._._._._._._._._._._._._._._' )
      520   FORMAT (1H0,T10, 'TOTAL BT FOR 19', T26,I2,T30, 'IS', T35,I3)
      521   FORMAT (T10, 'TOTAL ISOTHERMAL BT IS', T33,I3)
      550   FORMAT (T15,'ISO. OF MONTH', T30, A2,T35,I2,T40,'IS',T45,I3)
            NBT=0
            LSLNO=0
            LISO=0
      1     DO 1000 IM=1,12
            NM=0
            ISO=0
            DO 100 I=1, 5
      100   NL(I)=0
            IF (IM.EQ.1) GO TO 2
            IF (MON(IM).EQ.LMON) GO TO 5
            GO TO 50
      2     DO 101 I=1, 30
            LD(I)=0
            LDT(I)=0
            DELP(I)=0.0
      101   DELT(I)=0.0
            LCN=0
      3     J=1+7*LCN
            K=7+7*LCN
      4     READ(5,501,END=50) LT,LN,MO,YR,SLNO,NC,CN,(LD(I),LDT(I),I=J,K)
            IF (NC.EQ.CN) NBT=NBT+1
            IF (MON(IM).EQ.MO) GO TO 5
            LMON=MO
            GO TO 50
      5     IF (LSLNO.NE.SLNO.AND.NC.EQ.CN) GO TO 7
      6     LCN=LCN+1
            IF (LCN.EQ.CN) GO TO 3
            WRITE(6,502) SLNO
            GO TO 2
      7     LSLNO=SLNO
            NM=NM+1
            DO 8 L=1, 5
            IF (LAT(L).EQ.LT) GO TO 9
      8     CONTINUE
      9     M=L
            NL(M)=NL(M)+1
            DO 10 I=1, 30
            IF (LDT(I).EQ.0) GO TO 11
      10    CONTINUE
      11    K=I-1
            IF (K.LE.3) GO TO 33
            DO 13 I=1, K
            DEP(I)=LO(I)
      13    TEM(I)=LDT(I)/10.
            DO 14 I=2, K
            DELT(I-1)=TEM(I-1)-TEM(I)
            IF (DELT(I-1).LT.0.0) GO TO 33
      14    DELP(I-1)=DEP(I)-DEP(I-1)
            N=NL(M)
            TDELM=0.0
            TDELS=0.0
            J=0
            Y=K-1
            DO 16 I=1, Y
            IF (TDELM.GE.DELT(I)) GO TO 15
            TDELS=TDELM
            JJ=J
            TDELM=DELT(I)
            J=I
            GO TO 16
      15    IF (TDELS.GE.DELT(I)) GO TO 16
            TDELS=DELT(I)
            JJ=I
      16    CONTINUE
            IF (J.EQ.Y.AND.TDELM.LE.1.) GO TO 33
            IF (JJ.EQ.J.OR.JJ.EQ.(J+1).OR.JJ.EQ.(J-1)) GO TO 19
            IF (TDELS-0.5*TDELM) 19, 18, 18
      18    I=JJ
            DELPS=DELP(I)
            SDEP=DEP(I)+0.5*DELPS
            STEM=TEM(I)-0.5*TDELS
            WRITE(6,503) SLNO
            WRITE(6,504) SDEP, STEM
      19    JT=J
      20    I=JT
            IF (I.LE.2) GO TO 28
            IF (DELP(I-1)-DELT(I-1)/TDELM*10.) 27, 27, 28
      27    IF (DELP(I-1)/(DEP(K-1)-DEP(2)).GE..1) GO TO 28
            TDELM=TDELM+DELT(I-1)
            JT=JT-1
            GO TO 20
      28    THEMT(M,N)=TEM(I)
            DEPTP(M,N)=DEP(I)
      29    JB=J
      21    I=JB
            IF (DELP(I+1).EQ.0.0) GO TO 31
            IF (DELP(I+1)-DELT(I+1)/TDELM*10.) 30, 30, 31
      30    IF ((DELP(I+1)/(DEP(K-1)-DEP(2))).GE..1) GO TO 31
            TDELM=TDELM+DELT(I+1)
            JB=JB+1
            GO TO 21
      31    THEMB(M,N)=TEM(I+1)
            DEPBM(M,N)=DEP(I+1)
      32    I=JT
            DELPM=DEP(JB+1)-DEP(JT)
            DEPTH(M,N)=DEP(I)+0.5*DELPM
            THTEM(M,N)=TEM(I)-0.5*TDELM
            WRITE(6,505) SLNO
            WRITE(6,506) DEPTP(M,N),THEMT(M,N)
            WRITE(6,507) DEPBM(M,N), THEMB(M,N)
            WRITE(6,508) DEPTH(M,N), THTEM(M,N)
            GO TO 2
      33    ISO=ISO+1
            LISO=LISO+1
            WRITE(6,509) SLNO
            NL(M)=NL(M)-1
            GO TO 2
      50    WRITE(6,510) MON(IM), YR, NM
            WRITE(6,550) MON(IM), YR,ISO
            WRITE(6,511)
            DO 35 M=1, 5
            SUM1=0.0
            SUM2=0.0
            SUM3=0.0
            SUM4=0.0
            SUM5=0.0
            SUM6=0.0
            Y=NL(M)
            DO 34 N=1, Y
            IF (Y.EQ.0) GO TO 34
            SUM1=SUM1+THEMT(M,N)
            SUM2=SUM2+THEMB(M,N)
            SUM3=SUM3+THTEM(M,N)
            SUM4=SUM4+DEPTP(M,N)
            SUM5=SUM5+DEPBM(M,N)
            SUM6=SUM6+DEPTH(M,N)
      34    CONTINUE
            ATHEMT(M)=SUM1/N
            ATHEMB(M)=SUM2/N
            ATHTEM(M)=SUM3/N
            ADEPTP(M)=SUM4/N
            ADEPBM(M)=SUM5/N
            ADEPTH(M)=SUM6/N
            WRITE(6,512) M, NL(M)
```

Table C-1

TOTAL BT FOR JA 54 IS 0

TOTAL BT FOR MA 54 IS 0

TOTAL BT FOR MY 54 IS 0

TOTAL BT FOR JL 54 IS 30
ISO. OF MONTH JL 54 IS 1
AVERAGE THERMOCLINE DATA FOLLOW

LATITUDE 41 NUMBER OF BT 0		
DISCONTINUITY LAYER, UPPER:	0.	0.0
LOWER	0.	0.0
THE THERMOCLINE IS	0.	0.0
LATITUDE 42 NUMBER OF BT 0		
DISCONTINUITY LAYER, UPPER:	0.	0.0
LOWER	0.	0.0
THE THERMOCLINE IS	0.	0.0
LATITUDE 43 NUMBER OF BT 0		
DISCONTINUITY LAYER, UPPER:	0.	0.0
LOWER	0.	0.0
THE THERMOCLINE IS	0.	0.0
LATITUDE 44 NUMBER OF BT 22		
DISCONTINUITY LAYER, UPPER:	11.	20.9
LOWER	17.	12.8
THE THERMOCLINE IS	14.	16.9
LATITUDE 45 NUMBER OF BT 7		
DISCONTINUITY LAYER, UPPER:	13.	19.8
LOWER	17.	14.1
THE THERMOCLINE IS	15.	16.9

TOTAL BT FOR SP 54 IS 0

TOTAL BT FOR NO 54 IS 0

TOTAL BT FOR FE 54 IS 0

TOTAL BT FOR AP 54 IS 0

TOTAL BT FOR JU 54 IS 0

TOTAL BT FOR AU 54 IS 0

TOTAL BT FOR OC 54 IS 0

TOTAL BT FOR DC 54 IS 0

TOTAL BT FOR 19-54 IS 30
TOTAL ISOTHERMAL BT IS 1

Table C-2

TOTAL BT FOR JA 55 IS 0

TOTAL BT FOR MA 55 IS 0

TOTAL BT FOR MY 55 IS 0

TOTAL BT FOR JL 55 IS 0

TOTAL BT FOR SP 55 IS 0

TOTAL BT FOR NO 55 IS 0

TOTAL BT FOR FE 55 IS 0

TOTAL BT FOR AP 55 IS 0

TOTAL BT FOR JU 55 IS 128
ISO. OF MONTH JU 55 IS 20
AVERAGE THERMOCLINE DATA FOLLOW
LATITUDE 41 NUMBER OF BT 8

DISCONTINUITY LAYER, UPPER:	6.	17.8
LOWER	10.	11.7
THE THERMOCLINE IS	8.	14.7

LATITUDE 42 NUMBER OF BT 28

DISCONTINUITY LAYER, UPPER:	7.	17.3
LOWER	12.	11.0
THE THERMOCLINE IS	9.	14.2

LATITUDE 43 NUMBER OF BT 29

DISCONTINUITY LAYER, UPPER:	5.	16.3
LOWER	10.	9.4
THE THERMOCLINE IS	8.	12.9

LATITUDE 44 NUMBER OF BT 16

DISCONTINUITY LAYER, UPPER:	5.	14.3
LOWER	11.	8.0
THE THERMOCLINE IS	8.	11.1

LATITUDE 45 NUMBER OF BT 27

DISCONTINUITY LAYER, UPPER:	10.	13.1
LOWER	15.	8.8
THE THERMOCLINE IS	13.	10.9

TOTAL BT FOR AU 55 IS 121
ISO. OF MONTH AU 55 IS 15
AVERAGE THERMOCLINE DATA FOLLOW
LATITUDE 41 NUMBER OF BT 6

DISCONTINUITY LAYER, UPPER:	14.	20.8
LOWER	20.	10.7
THE THERMOCLINE IS	17.	15.8

LATITUDE 42 NUMBER OF BT 11

DISCONTINUITY LAYER, UPPER:	12.	22.0
LOWER	19.	12.2
THE THERMOCLINE IS	15.	17.1

LATITUDE 43 NUMBER OF BT 26

DISCONTINUITY LAYER, UPPER:	12.	19.6
LOWER	17.	9.1
THE THERMOCLINE IS	15.	14.3

LATITUDE 44 NUMBER OF BT 22

DISCONTINUITY LAYER, UPPER:	9.	19.6
LOWER	17.	9.7
THE THERMOCLINE IS	13.	14.6

LATITUDE 45 NUMBER OF BT 41

DISCONTINUITY LAYER, UPPER:	12.	20.3
LOWER	17.	12.3
THE THERMOCLINE IS	14.	16.3

TOTAL BT FOR OC 55 IS 0

TOTAL BT FOR DC 55 IS 0

TOTAL BT FOR 19 55 IS 249
TOTAL ISOTHERMAL BT IS 35

Table C-3

TOTAL BT FOR JA 61 IS 0

TOTAL BT FOR MA 61 IS 0

TOTAL BT FOR MY 61 IS 0

TOTAL BT FOR JL 61 IS 71
ISO. OF MONTH JL 61 IS 18
AVERAGE THERMOCLINE DATA FOLLOW
LATITUDE 41 NUMBER OF BT 5

DISCONTINUITY LAYER, UPPER:	7.	20.9
LOWER	9.	13.1
THE THERMOCLINE IS	8.	17.0

LATITUDE 42 NUMBER OF BT 30

DISCONTINUITY LAYER, UPPER:	9.	18.8
LOWER	13.	13.2
THE THERMOCLINE IS	11.	16.0

LATITUDE 43 NUMBER OF BT 17

DISCONTINUITY LAYER, UPPER:	5.	12.6
LOWER	10.	9.1
THE THERMOCLINE IS	8.	10.9

LATITUDE 44 NUMBER OF BT 0

DISCONTINUITY LAYER, UPPER:	0.	0.0
LOWER	0.	0.0
THE THERMOCLINE IS	0.	0.0

LATITUDE 45 NUMBER OF BT 1

DISCONYINUITY LAYER, UPPER:	6.	23.3
LOWER	9.	11.1
THE THERMOCLINE IS	7.	17.2

TOTAL BT FOR SP 61 IS 9

TOTAL BT FOR NO 61 IS 0

TOTAL BT FOR FE 61 IS 0

TOTAL BT FOR AP 61 IS 0

TOTAL BT FOR JU 61 IS 0

TOTAL BT FOR AU 61 IS 85
ISO. OF MONTH AU 61 IS 44
AVERAGE THERMOCLINE DATA FOLLOW
LATITUDE 41 NUMBER OF BT 28

DISCONTINUITY LAYER, UPPER:	5.	21.8
LOWER	7.	15.8
THE THERMOCLINE IS	6.	18.8

LATITUDE 42 NUMBER OF BT 5

DISCONTINUITY LAYER, UPPER:	6.	22.0
LOWER	8.	19.8
THE THERMOCLINE IS	7.	20.9

LATITUDE 43 NUMBER OF BT 8

DISCONTINUITY LAYER, UPPER:	10.	20.6
LOWER	14.	12.1
THE THERMOCLINE IS	12.	16.3

LATITUDE 44 NUMBER OF BT 0

DISCONTINUITY LAYER, UPPER:	0.	0.0
LOWER	0.	0.0
THE THERMOCLINE IS	0.	0.0

LATITUDE 45 NUMBER OF BT 0

DISCONTINUITY LAYER, UPPER:	0.	0.0
LOWER	0.	0.0
THE THERMOCLINE IS	0.	0.0

TOTAL BT FOR OC 61 IS 0

TOTAL BT FOR DC 61 IS 0

TOTAL BT FOR 19 61 IS 156
TOTAL ISOTHERMAL BT IS 62

Table C-4

TOTAL BT FOR JA 62 IS 0

TOTAL BT FOR MA 62 IS 0

TOTAL BT FOR MY 62 IS 0

TOTAL BT FOR JL 62 IS 0

TOTAL BT FOR FE 62 IS 0
0

TOTAL BT FOR AP 62 IS 0

TOTAL BT FOR JU 62 IS 0

TOTAL BT FOR AU 62 IS 251
ISO. OF MONTH AU 62 IS 19
AVERAGE THERMOCLINE DATA FOLLOW

LATITUDE 41 NUMBER OF BT 9		
DISCONTINUITY LAYER, UPPER:	13.	20.4
LOWER	16.	14.5
THE THERMOCLINE IS	14.	17.4
LATITUDE 42 NUMBER OF BT 153		
DISCONTINUITY LAYER, UPPER:	18.	18.3
LOWER	23.	9.1
THE THERMOCLINE IS	20.	13.7
LATITUDE 43 NUMBER OF BT 70		
DISCONTINUITY LAYER, UPPER:	18.	17.1
LOWER	23.	8.2
THE THERMOCLINE IS	21.	12.7
LATITUDE 44 NUMBER OF BT 0		
DISCONTINUITY LAYER, UPPER:	0.	0.0
LOWER	0.	0.0
THE THERMOCLINE IS	0.	0.0
LATITUDE 45 NUMBER OF BT 0		
DISCONTINUITY LAYER, UPPER:	0.	0.0
LOWER	0.	0.0
THE THERMOCLINE IS	0.	0.0

TOTAL BT FOR SP 62 IS 5
ISO. OF MONTH SP 62 IS 2
AVERAGE THERMOCLINE DATA FOLLOW

LATITUDE 41 NUMBER OF BT 0		
DISCONTINUITY LAYER, UPPER:	0.	0.0
LOWER	0.	0.0
THE THERMOCLINE IS	0.	0.0
LATITUDE 42 NUMBER OF BT 3		
DISCONTINUITY LAYER, UPPER:	29.	17.2
LOWER	33.	6.7
THE THERMOCLINE IS	31.	11.9
LATITUDE 43 NUMBER OF BT 0		
DISCONTINUITY LAYER, UPPER:	0.	0.0
LOWER	0.	0.0
THE THERMOCLINE IS	0.	0.0
LATITUDE 44 NUMBER OF BT 0		
DISCONTINUITY LAYER, UPPER:	0.	0.0
LOWER	0.	0.0
THE THERMOCLINE IS	0.	0.0
LATITUDE 45 NUMBER OF BT 0		
DISCONTINUITY LAYER, UPPER:	0.	0.0
LOWER	0.	0.0
THE THERMOCLINE IS	0.	0.0

TOTAL BT FOR OC 62 IS 19
ISO. OF MONTH OC 62 IS 4
AVERAGE THERMOCLINE DATA FOLLOW

LATITUDE 41 NUMBER OF BT 0		
DISCONTINUITY LAYER, UPPER:	0.	0.0
LOWER	0.	0.0
THE THERMOCLINE IS	0.	0.0
LATITUDE 42 NUMBER OF BT 15		
DISCONTINUITY LAYER, UPPER:	36.	11.5
LOWER	40.	6.6
THE THERMOCLINE IS	38.	9.1
LATITUDE 43 NUMBER OF BT 0		
DISCONTINUITY LAYER, UPPER:	0.	0.0
LOWER	0.	0.0
THE THERMOCLINE IS	0.	0.0
LATITUDE 44 NUMBER OF BT 0		
DISCONTINUITY LAYER, UPPER:	0.	0.0
LOWER	0.	0.0
THE THERMOCLINE IS	0.	0.0
LATITUDE 45 NUMBER OF BT 0		
DISCONTINUITY LAYER, UPPER:	0.	0.0
LOWER	0.	0.0
THE THERMOCLINE IS	0.	0.0

ISO. OF MONTH NO 62 IS 58
AVERAGE THERMOCLINE DATA FOLLOW

LATITUDE 41	NUMBER OF BT	0	
DISCONTINUITY LAYER,	UPPER:	D.	D.D
	LOWER	D.	D.D
	THE THERMOCLINE IS	D.	D.D
LATITUDE 42	NUMBER OF BT	35	
DISCONTINUITY LAYER,	UPPER:	48.	8.7
	LOWER	57.	5.1
	THE THERMOCLINE IS	52.	6.9
LATITUDE 43	NUMBER OF BT	60	
DISCONTINUITY LAYER,	UPPER:	40.	9.7
	LOWER	48.	6.1
	THE THERMOCLINE IS	44.	7.9
LATITUDE 44	NUMBER OF BT	0	
DISCONTINUITY LAYER,	UPPER:	D.	D.D
	LOWER	D.	D.D
	THE THERMOCLINE IS	D.	D.D
LATITUDE 45	NUMBER OF BT	1	
DISCONTINUITY LAYER,	UPPER:	39.	11.D
	LOWER	48.	5.D
	THE THERMOCLINE IS	43.	8.D

TOTAL BT FOR 19 62 IS 429
TOTAL ISOTHERMAL BT IS 83

Table C-5

TOTAL BT FOR JA 63 IS 0

TOTAL BT FOR MA 63 IS 0

TOTAL BT FOR FE 63 IS 0

TOTAL BT FOR AP 63 IS 141
ISO. OF MONTH AP 63 IS 98
AVERAGE THERMOCLINE DATA FOLLOW

LATITUDE 41 NUMBER OF BT 34		
DISCONTINUITY LAYER, UPPER:	6.	6.9
LOWER	11.	6.0
THE MEAN VALUE IS	9.	6.4
LATITUDE 42 NUMBER OF BT 4		
DISCONTINUITY LAYER, UPPER:	8.	5.3
LOWER	18.	4.9
THE MEAN VALUE IS	13.	5.1
LATITUDE 43 NUMBER OF BT 5		
DISCONTINUITY LAYER, UPPER:	33.	1.1
LOWER	54.	1.0
THE MEAN VALUE IS	43.	1.0
LATITUDE 44 NUMBER OF BT 0		
DISCONTINUITY LAYER, UPPER:	0.	0.0
LOWER	0.	0.0
THE MEAN VALUE IS	0.	0.0
LATITUDE 45 NUMBER OF BT 0		
DISCONTINUITY LAYER, UPPER:	0.	0.0
LOWER	0.	0.0
THE MEAN VALUE IS	0.	0.0

TOTAL BT FOR MY 63 IS 42
ISO. OF MONTH MY 63 IS 39
AVERAGE THERMOCLINE DATA FOLLOW

LATITUDE 41 NUMBER OF BT 0		
DISCONTINUITY LAYER, UPPER:	0.	0.0
LOWER	0.	0.0
THE MEAN VALUE IS	0.	0.0
LATITUDE 42 NUMBER OF BT 1		
DISCONTINUITY LAYER, UPPER:	22.	3.5
LOWER	23.	3.4
THE MEAN VALUE IS	22.	3.4
LATITUDE 43 NUMBER OF BT 2		
DISCONTINUITY LAYER, UPPER:	19.	7.1
LOWER	27.	6.1
THE MEAN VALUE IS	23.	6.6
LATITUDE 44 NUMBER OF BT 0		
DISCONTINUITY LAYER, UPPER:	0.	0.0
LOWER	0.	0.0
THE MEAN VALUE IS	0.	0.0
LATITUDE 45 NUMBER OF BT 0		
DISCONTINUITY LAYER, UPPER:	0.	0.0
LOWER	0.	0.0
THE MEAN VALUE IS	0.	0.0

TOTAL BT FOR JU 63 IS 47
ISO. OF MONTH JU 63 IS 5
AVERAGE THERMOCLINE DATA FOLLOW

LATITUDE 41 NUMBER OF BT 1		
DISCONTINUITY LAYER, UPPER:	4.	19.1
LOWER	9.	11.6
THE MEAN VALUE IS	6.	15.3
LATITUDE 42 NUMBER OF BT 3		
DISCONTINUITY LAYER, UPPER:	6.	14.0
LOWER	9.	8.4
THE MEAN VALUE IS	7.	11.2
LATITUDE 43 NUMBER OF BT 38		
DISCONTINUITY LAYER, UPPER:	7.	10.5
LOWER	14.	7.4
THE MEAN VALUE IS	11.	9.0
LATITUDE 44 NUMBER OF BT 0		
DISCONTINUITY LAYER, UPPER:	0.	0.0
LOWER	0.	0.0
THE MEAN VALUE IS	0.	0.0
LATITUDE 45 NUMBER OF BT 0		
DISCONTINUITY LAYER, UPPER:	0.	0.0
LOWER	0.	0.0
THE MEAN VALUE IS	0.	0.0

AVERAGE THERMOCLINE DATA FOLLOW

LATITUDE 41 NUMBER OF BT 0		
DISCONTINUITY LAYER, UPPER:	0.	0.0
LOWER	0.	0.0
THE MEAN VALUE IS	0.	0.0

LATITUDE 42 NUMBER OF BT 0		
DISCONTINUITY LAYER, UPPER:	0.	0.0
LOWER	0.	0.0
THE MEAN VALUE IS	0.	0.0

LATITUDE 43 NUMBER OF BT 39		
DISCONTINUITY LAYER, UPPER:	2.	17.7
LOWER	8.	8.1
THE MEAN VALUE IS	5.	12.9

LATITUDE 44 NUMBER OF BT 0		
DISCONTINUITY LAYER, UPPER:	0.	0.0
LOWER	0.	0.0
THE MEAN VALUE IS	0.	0.0

LATITUDE 45 NUMBER OF BT 0		
DISCONTINUITY LAYER, UPPER:	0.	0.0
LOWER	0.	0.0
THE MEAN VALUE IS	0.	0.0

TOTAL BT FOR SP 63 IS 73
TSD. OF MONTH SP 63 IS 8
AVERAGE THERMOCLINE DATA FOLLOW

LATITUDE 41 NUMBER OF BT 0		
DISCONTINUITY LAYER, UPPER:	0.	0.0
LOWER	0.	0.0
THE MEAN VALUE IS	0.	0.0

LATITUDE 42 NUMBER OF BT 0		
DISCONTINUITY LAYER, UPPER:	0.	0.0
LOWER	0.	0.0
THE MEAN VALUE IS	0.	0.0

LATITUDE 43 NUMBER OF BT 65		
DISCONTINUITY LAYER, UPPER:	24.	14.5
LOWER	32.	7.4
THE MEAN VALUE IS	29.	10.9

LATITUDE 44 NUMBER OF BT 0		
DISCONTINUITY LAYER, UPPER:	0.	0.0
LOWER	0.	0.0
THE MEAN VALUE IS	0.	0.0

LATITUDE 45 NUMBER OF BT 0		
DISCONTINUITY LAYER, UPPER:	0.	0.0
LOWER	0.	0.0
THE MEAN VALUE IS	0.	0.0

TOTAL BT FOR OC 63 IS 75
TSD. OF MONTH OC 63 IS 12
AVERAGE THERMOCLINE DATA FOLLOW

LATITUDE 41 NUMBER OF BT 2		
DISCONTINUITY LAYER, UPPER:	6.	17.6
LOWER	17.	17.2
THE MEAN VALUE IS	11.	17.4

LATITUDE 42 NUMBER OF BT 14		
DISCONTINUITY LAYER, UPPER:	30.	15.3
LOWER	37.	6.7
THE MEAN VALUE IS	34.	11.0

LATITUDE 43 NUMBER OF BT 47		
DISCONTINUITY LAYER, UPPER:	25.	14.0
LOWER	30.	6.7
THE MEAN VALUE IS	27.	10.3

LATITUDE 44 NUMBER OF BT 0		
DISCONTINUITY LAYER, UPPER:	0.	0.0
LOWER	0.	0.0
THE MEAN VALUE IS	0.	0.0

LATITUDE 45 NUMBER OF BT 0		
DISCONTINUITY LAYER, UPPER:	0.	0.0
LOWER	0.	0.0
THE MEAN VALUE IS	0.	0.0

Table C-5 (Concluded)

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TOTAL BT FOR   NO   63   IS     4
ISO. OF MONTH  NO   63   IS     1
AVERAGE THERMOCLINE DATA FOLLOW
LATITUDE 41  NUMBER OF BT     0
DISCONTINUITY LAYER, UPPER:        0.        0.0
                     LOWER         0.        0.0
              THE MEAN VALUE IS    0.        0.0

LATITUDE 42  NUMBER OF BT     2
DISCONTINUITY LAYER, UPPER:       36.       13.1
                     LOWER        42.        5.4
              THE MEAN VALUE IS   39.        9.3

LATITUDE 43  NUMBER OF BT     1
DISCONTINUITY LAYER, UPPER:       35.       13.5
                     LOWER        41.        5.4
              THE MEAN VALUE IS   38.        9.4

LATITUDE 44  NUMBER OF BT     0
DISCONTINUITY LAYER, UPPER:        0.        0.0
                     LOWER         0.        0.0
              THE MEAN VALUE IS    0.        0.0

LATITUDE 45  NUMBER OF BT     0
DISCONTINUITY LAYER, UPPER:        0.        0.0
                     LOWER         0.        0.0
              THE MEAN VALUE IS    0.        0.0
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TOTAL BT FOR   DC   63   IS     0

TOTAL BT FOR 19 63  IS   425
TOTAL ISOTHERMAL BT IS 166
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Table C-6

TOTAL BT FOR JA 64 IS 0

TOTAL BT FOR MA 64 IS 0

TOTAL BT FOR MY 64 IS 15
ISO. OF MONTH MY 64 IS 10
AVERAGE THERMOCLINE DATA FOLLOW

LATITUDE 41 NUMBER OF BT 1		
DISCONTINUITY LAYER, UPPER:	6.	10.0
LOWER	12.	7.0
THE MEAN VALUE IS	9.	8.5
LATITUDE 42 NUMBER OF BT 3		
DISCONTINUITY LAYER, UPPER:	13.	7.7
LOWER	18.	5.8
THE MEAN VALUE IS	16.	6.8
LATITUDE 43 NUMBER OF BT 0		
DISCONTINUITY LAYER, UPPER:	0.	0.0
LOWER	0.	0.0
THE MEAN VALUE IS	0.	0.0
LATITUDE 44 NUMBER OF BT 1		
DISCONTINUITY LAYER, UPPER:	6.	11.2
LOWER	16.	10.0
THE MEAN VALUE IS	11.	10.6
LATITUDE 45 NUMBER OF BT 0		
DISCONTINUITY LAYER, UPPER:	0.	0.0
LOWER	0.	0.0
THE MEAN VALUE IS	0.	0.0

TOTAL BT FOR FE 64 IS 0

TOTAL BT FOR AP 64 IS 19
ISO. OF MONTH AP 64 IS 18
AVERAGE THERMOCLINE DATA FOLLOW

LATITUDE 41 NUMBER OF BT 0		
DISCONTINUITY LAYER, UPPER:	0.	0.0
LOWER	0.	0.0
THE MEAN VALUE IS	0.	0.0
LATITUDE 42 NUMBER OF BT 1		
DISCONTINUITY LAYER, UPPER:	3.	8.1
LOWER	6.	7.0
THE MEAN VALUE IS	5.	7.5
LATITUDE 43 NUMBER OF BT 0		
DISCONTINUITY LAYER, UPPER:	0.	0.0
LOWER	0.	0.0
THE MEAN VALUE IS	0.	0.0
LATITUDE 44 NUMBER OF BT 0		
DISCONTINUITY LAYER, UPPER:	0.	0.0
LOWER	0.	0.0
THE MEAN VALUE IS	0.	0.0
LATITUDE 45 NUMBER OF BT 0		
DISCONTINUITY LAYER, UPPER:	0.	0.0
LOWER	0.	0.0
THE MEAN VALUE IS	0.	0.0

TOTAL BT FOR JU 64 IS 114
ISO. OF MONTH JU 64 IS 13
AVERAGE THERMOCLINE DATA FOLLOW

LATITUDE 41 NUMBER OF BT 4		
DISCONTINUITY LAYER, UPPER:	11.	14.8
LOWER	16.	10.8
THE MEAN VALUE IS	13.	12.8
LATITUDE 42 NUMBER OF BT 22		
DISCONTINUITY LAYER, UPPER:	12.	13.4
LOWER	21.	7.8
THE MEAN VALUE IS	17.	10.6
LATITUDE 43 NUMBER OF BT 47		
DISCONTINUITY LAYER, UPPER:	11.	8.2
LOWER	20.	6.0
THE MEAN VALUE IS	16.	7.1
LATITUDE 44 NUMBER OF BT 28		
DISCONTINUITY LAYER, UPPER:	6.	8.3
LOWER	13.	5.8
THE MEAN VALUE IS	10.	7.0
LATITUDE 45 NUMBER OF BT 0		
DISCONTINUITY LAYER, UPPER:	0.	0.0
LOWER	0.	0.0
THE MEAN VALUE IS	0.	0.0

Table C-6 (Continued)

TOTAL BT FOR JL 64 IS 84		
ISO. OF MONTH JL 64 IS 12		
AVERAGE THERMOCLINE DATA FOLLOW		
LATITUDE 41 NUMBER OF BT 2		
DISCONTINUITY LAYER, UPPER:	16.	18.5
LOWER	21.	13.1
THE MEAN VALUE IS	19.	15.8
LATITUDE 42 NUMBER OF BT 24		
DISCONTINUITY LAYER, UPPER:	12.	16.3
LOWER	22.	9.1
THE MEAN VALUE IS	17.	12.7
LATITUDE 43 NUMBER OF BT 41		
DISCONTINUITY LAYER, UPPER:	14.	15.5
LOWER	20.	8.4
THE MEAN VALUE IS	17.	12.0
LATITUDE 44 NUMBER OF BT 5		
DISCONTINUITY LAYER, UPPER:	6.	10.0
LOWER	12.	6.1
THE MEAN VALUE IS	9.	8.0
LATITUDE 45 NUMBER OF BT 0		
DISCONTINUITY LAYER, UPPER:	0.	0.0
LOWER	0.	0.0
THE MEAN VALUE IS	0.	0.0

TOTAL BT FOR SP 64 IS 97		
ISO. OF MONTH SP 64 IS 25		
AVERAGE THERMOCLINE DATA FOLLOW		
LATITUDE 41 NUMBER OF BT 3		
DISCONTINUITY LAYER, UPPER:	15.	16.2
LOWER	18.	11.3
THE MEAN VALUE IS	17.	13.8
LATITUDE 42 NUMBER OF BT 13		
DISCONTINUITY LAYER, UPPER:	22.	16.9
LOWER	33.	6.6
THE MEAN VALUE IS	27.	11.8
LATITUDE 43 NUMBER OF BT 53		
DISCONTINUITY LAYER, UPPER:	40.	14.7
LOWER	46.	7.2
THE MEAN VALUE IS	43.	10.9
LATITUDE 44 NUMBER OF BT 3		
DISCONTINUITY LAYER, UPPER:	13.	13.9
LOWER	21.	7.4
THE MEAN VALUE IS	17.	10.6
LATITUDE 45 NUMBER OF BT 0		
DISCONTINUITY LAYER, UPPER:	0.	0.0
LOWER	0.	0.0
THE MEAN VALUE IS	0.	0.0

TOTAL BT FOR AU 64 IS 68		
ISO. OF MONTH AU 64 IS 4		
AVERAGE THERMOCLINE DATA FOLLOW		
LATITUDE 41 NUMBER OF BT 35		
DISCONTINUITY LAYER, UPPER:	10.	16.9
LOWER	12.	13.2
THE MEAN VALUE IS	11.	15.0
LATITUDE 42 NUMBER OF BT 15		
DISCONTINUITY LAYER, UPPER:	21.	16.5
LOWER	29.	7.6
THE MEAN VALUE IS	25.	12.1
LATITUDE 43 NUMBER OF BT 8		
DISCONTINUITY LAYER, UPPER:	12.	15.6
LOWER	18.	8.5
THE MEAN VALUE IS	15.	12.0
LATITUDE 44 NUMBER OF BT 6		
DISCONTINUITY LAYER, UPPER:	15.	13.9
LOWER	19.	7.5
THE MEAN VALUE IS	17.	10.7
LATITUDE 45 NUMBER OF BT 0		
DISCONTINUITY LAYER, UPPER:	0.	0.0
LOWER	0.	0.0
THE MEAN VALUE IS	0.	0.0

TOTAL BT FOR OC 64 IS 30		
ISO. OF MONTH OC 64 IS 8		
AVERAGE THERMOCLINE DATA FOLLOW		
LATITUDE 41 NUMBER OF BT 1		
DISCONTINUITY LAYER, UPPER:	33.	13.3
LOWER	38.	9.0
THE MEAN VALUE IS	36.	11.1
LATITUDE 42 NUMBER OF BT 11		
DISCONTINUITY LAYER, UPPER:	27.	11.8
LOWER	34.	7.2
THE MEAN VALUE IS	31.	9.5
LATITUDE 43 NUMBER OF BT 2		
DISCONTINUITY LAYER, UPPER:	41.	7.8
LOWER	49.	4.5
THE MEAN VALUE IS	45.	6.2
LATITUDE 44 NUMBER OF BT 4		
DISCONTINUITY LAYER, UPPER:	43.	9.0
LOWER	55.	5.8
THE MEAN VALUE IS	49.	7.4
LATITUDE 45 NUMBER OF BT 4		
DISCONTINUITY LAYER, UPPER:	55.	12.8
LOWER	61.	9.3
THE MEAN VALUE IS	58.	11.1

Table C-6 (Concluded)

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TOTAL BT FOR   NO   64   IS    32
ISO. OF MONTH  NO   64   IS    11
AVERAGE THERMOCLINE DATA FOLLOW
LATITUDE 41  NUMBER OF BT    1
DISCONTINUITY LAYER, UPPER:      35.      12.3
                     LOWER       38.       7.9
               THE MEAN VALUE IS 37.      10.1

LATITUDE 42  NUMBER OF BT   11
DISCONTINUITY LAYER, UPPER:      30.      10.5
                     LOWER       39.       7.1
               THE MEAN VALUE IS 35.       8.8

LATITUDE 43  NUMBER OF BT    4
DISCONTINUITY LAYER, UPPER:      37.       8.8
                     LOWER       55.       5.9
               THE MEAN VALUE IS 46.       7.3

LATITUDE 44  NUMBER OF BT    4
DISCONTINUITY LAYER, UPPER:      51.       8.0
                     LOWER       67.       5.4
               THE MEAN VALUE IS 59.       6.7

LATITUDE 45  NUMBER OF BT    1
DISCONTINUITY LAYER, UPPER:      70.      10.1
                     LOWER       78.       8.3
               THE MEAN VALUE IS 74.       9.2
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TOTAL BT FOR   DC   64   IS     0
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TOTAL BT FOR 19 64  IS   459
TOTAL ISOTHERMAL BT IS 101
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Table C-7

TOTAL BT FOR JA 65 IS 0

TOTAL BT FOR MA 65 IS 0

TOTAL BT FOR MY 65 IS 30
ISO. OF MONTH MY 65 IS 22
AVERAGE THERMOCLINE DATA FOLLOW

LATITUDE 41 NUMBER OF BT 5		
DISCONTINUITY LAYER, UPPER:	10.	8.1
LOWER	16.	6.3
THE MEAN VALUE IS	13.	7.2
LATITUDE 42 NUMBER OF BT 1		
DISCONTINUITY LAYER, UPPER:	18.	6.3
LOWER	23.	4.8
THE MEAN VALUE IS	20.	5.5
LATITUDE 43 NUMBER OF BT 1		
DISCONTINUITY LAYER, UPPER:	12.	5.3
LOWER	16.	3.9
THE MEAN VALUE IS	14.	4.6
LATITUDE 44 NUMBER OF BT 1		
DISCONTINUITY LAYER, UPPER:	10.	6.5
LOWER	14.	4.3
THE MEAN VALUE IS	12.	5.4
LATITUDE 45 NUMBER OF BT 0		
DISCONTINUITY LAYER, UPPER:	0.	0.0
LOWER	0.	0.0
THE MEAN VALUE IS	0.	0.0

TOTAL BT FOR JL 65 IS 37
ISO. OF MONTH JL 65 IS 4
AVERAGE THERMOCLINE DATA FOLLOW

LATITUDE 41 NUMBER OF BT 1		
DISCONTINUITY LAYER, UPPER:	12.	17.5
LOWER	15.	14.4
THE MEAN VALUE IS	13.	15.9
LATITUDE 42 NUMBER OF BT 13		
DISCONTINUITY LAYER, UPPER:	16.	14.8
LOWER	22.	7.7
THE MEAN VALUE IS	19.	11.2
LATITUDE 43 NUMBER OF BT 13		
DISCONTINUITY LAYER, UPPER:	14.	14.5
LOWER	20.	7.9
THE MEAN VALUE IS	17.	11.2
LATITUDE 44 NUMBER OF BT 6		
DISCONTINUITY LAYER, UPPER:	9.	13.9
LOWER	18.	7.6
THE MEAN VALUE IS	13.	10.7
LATITUDE 45 NUMBER OF BT 0		
DISCONTINUITY LAYER, UPPER:	0.	0.0
LOWER	0.	0.0
THE MEAN VALUE IS	0.	0.0

TOTAL BT FOR FE 65 IS 0

TOTAL BT FOR AP 65 IS 0

TOTAL BT FOR JU 65 IS 50
ISO. OF MONTH JU 65 IS 15
AVERAGE THERMOCLINE DATA FOLLOW

LATITUDE 41 NUMBER OF BT 2		
DISCONTINUITY LAYER, UPPER:	20.	11.6
LOWER	23.	7.7
THE MEAN VALUE IS	22.	9.6
LATITUDE 42 NUMBER OF BT 18		
DISCONTINUITY LAYER, UPPER:	14.	10.6
LOWER	21.	6.9
THE MEAN VALUE IS	17.	8.7
LATITUDE 43 NUMBER OF BT 11		
DISCONTINUITY LAYER, UPPER:	16.	9.0
LOWER	24.	6.3
THE MEAN VALUE IS	20.	7.7
LATITUDE 44 NUMBER OF BT 4		
DISCONTINUITY LAYER, UPPER:	16.	8.5
LOWER	27.	5.7
THE MEAN VALUE IS	21.	7.1
LATITUDE 45 NUMBER OF BT 0		
DISCONTINUITY LAYER, UPPER:	0.	0.0
LOWER	0.	0.0
THE MEAN VALUE IS	0.	0.0

TOTAL BT FOR AU 65 IS 36
ISO. OF MONTH AU 65 IS 5
AVERAGE THERMOCLINE DATA FOLLOW

LATITUDE 41 NUMBER OF BT 0		
DISCONTINUITY LAYER, UPPER:	0.	0.0
LOWER	0.	0.0
THE MEAN VALUE IS	0.	0.0
LATITUDE 42 NUMBER OF BT 0		
DISCONTINUITY LAYER, UPPER:	0.	0.0
LOWER	0.	0.0
THE MEAN VALUE IS	0.	0.0
LATITUDE 43 NUMBER OF BT 11		
DISCONTINUITY LAYER, UPPER:	18.	16.3
LOWER	24.	8.0
THE MEAN VALUE IS	21.	12.2
LATITUDE 44 NUMBER OF BT 5		
DISCONTINUITY LAYER, UPPER:	22.	14.9
LOWER	30.	6.9
THE MEAN VALUE IS	26.	10.9
LATITUDE 45 NUMBER OF BT 15		
DISCONTINUITY LAYER, UPPER:	16.	16.3
LOWER	23.	11.1
THE MEAN VALUE IS	20.	13.7

Table C-7 (Concluded)

TOTAL BT FOR SP 65 IS 25
ISO. OF MONTH SP 65 IS 4
AVERAGE THERMOCLINE DATA FOLLOW

LATITUDE 41 NUMBER OF BT 0		
DISCONTINUITY LAYER, UPPER:	0.	0.0
LOWER	0.	0.0
THE MEAN VALUE IS	0.	0.0
LATITUDE 42 NUMBER OF BT 4		
DISCONTINUITY LAYER, UPPER:	20.	17.4
LOWER	29.	7.7
THE MEAN VALUE IS	25.	12.6
LATITUDE 43 NUMBER OF BT 11		
DISCONTINUITY LAYER, UPPER:	21.	13.7
LOWER	27.	7.8
THE MEAN VALUE IS	24.	10.7
LATITUDE 44 NUMBER OF BT 6		
DISCONTINUITY LAYER, UPPER:	22.	13.7
LOWER	29.	6.3
THE MEAN VALUE IS	26.	10.0
LATITUDE 45 NUMBER OF BT 0		
DISCONTINUITY LAYER, UPPER:	0.	0.0
LOWER	0.	0.0
THE MEAN VALUE IS	0.	0.0

TOTAL BT FOR NO 65 IS 63
ISO. OF MONTH NO 65 IS 18
AVERAGE THERMOCLINE DATA FOLLOW

LATITUDE 41 NUMBER OF BT 0		
DISCONTINUITY LAYER, UPPER:	0.	0.0
LOWER	0.	0.0
THE MEAN VALUE IS	0.	0.0
LATITUDE 42 NUMBER OF BT 34		
DISCONTINUITY LAYER, UPPER:	51.	8.4
LOWER	58.	5.8
THE MEAN VALUE IS	55.	7.1
LATITUDE 43 NUMBER OF BT 6		
DISCONTINUITY LAYER, UPPER:	57.	7.8
LOWER	69.	5.6
THE MEAN VALUE IS	63.	6.7
LATITUDE 44 NUMBER OF BT 5		
DISCONTINUITY LAYER, UPPER:	53.	7.8
LOWER	61.	5.2
THE MEAN VALUE IS	57.	6.5
LATITUDE 45 NUMBER OF BT 0		
DISCONTINUITY LAYER, UPPER:	0.	0.0
LOWER	0.	0.0
THE MEAN VALUE IS	0.	0.0

TOTAL BT FOR OC 65 IS 39
ISO. OF MONTH OC 65 IS 9
AVERAGE THERMOCLINE DATA FOLLOW

LATITUDE 41 NUMBER OF BT 0		
DISCONTINUITY LAYER, UPPER:	0.	0.0
LOWER	0.	0.0
THE MEAN VALUE IS	0.	0.0
LATITUDE 42 NUMBER OF BT 18		
DISCONTINUITY LAYER, UPPER:	35.	11.0
LOWER	42.	7.5
THE MEAN VALUE IS	39.	9.3
LATITUDE 43 NUMBER OF BT 8		
DISCONTINUITY LAYER, UPPER:	25.	11.5
LOWER	30.	6.5
THE MEAN VALUE IS	27.	9.0
LATITUDE 44 NUMBER OF BT 4		
DISCONTINUITY LAYER, UPPER:	33.	11.4
LOWER	40.	5.3
THE MEAN VALUE IS	37.	8.3
LATITUDE 45 NUMBER OF BT 0		
DISCONTINUITY LAYER, UPPER:	0.	0.0
LOWER	0.	0.0
THE MEAN VALUE IS	0.	0.0

TOTAL BT FOR DC 65 IS 0

TOTAL BT FOR 19 65 IS 280
TOTAL ISOTHERMAL BT IS 77

Table C-8

TOTAL BT FOR JA 66 IS 0

TOTAL BT FOR MA 66 IS 26
ISO. OF MONTH MA 66 IS 26

TOTAL BT FOR MY 66 IS 23
ISO. OF MONTH MY 66 IS 16
AVERAGE THERMOCLINE DATA FOLLOW

LATITUDE 41 NUMBER OF BT 1		
DISCONTINUITY LAYER, UPPER:	4.	7.9
LOWER	5.	7.2
THE MEAN VALUE IS	5.	7.5
LATITUDE 42 NUMBER OF BT 4		
DISCONTINUITY LAYER, UPPER:	12.	6.3
LOWER	16.	5.5
THE MEAN VALUE IS	14.	5.9
LATITUDE 43 NUMBER OF BT 2		
DISCONTINUITY LAYER, UPPER:	3.	4.2
LOWER	18.	3.9
THE MEAN VALUE IS	10.	4.0
LATITUDE 44 NUMBER OF BT 0		
DISCONTINUITY LAYER, UPPER:	0.	0.0
LOWER	0.	0.0
THE MEAN VALUE IS	0.	0.0
LATITUDE 45 NUMBER OF BT 0		
DISCONTINUITY LAYER, UPPER:	0.	0.0
LOWER	0.	0.0
THE MEAN VALUE IS	0.	0.0

TOTAL BT FOR FE 66 IS 0

TOTAL BT FOR AP 66 IS 58
ISO. OF MONTH AP 66 IS 53
AVERAGE THERMOCLINE DATA FOLLOW

LATITUDE 41 NUMBER OF BT 1		
DISCONTINUITY LAYER, UPPER:	8.	6.6
LOWER	9.	6.0
THE MEAN VALUE IS	8.	6.3
LATITUDE 42 NUMBER OF BT 3		
DISCONTINUITY LAYER, UPPER:	6.	4.8
LOWER	37.	4.5
THE MEAN VALUE IS	21.	4.7
LATITUDE 43 NUMBER OF BT 1		
DISCONTINUITY LAYER, UPPER:	6.	8.1
LOWER	9.	7.0
THE MEAN VALUE IS	7.	7.5
LATITUDE 44 NUMBER OF BT 0		
DISCONTINUITY LAYER, UPPER:	0.	0.0
LOWER	0.	0.0
THE MEAN VALUE IS	0.	0.0
LATITUDE 45 NUMBER OF BT 0		
DISCONTINUITY LAYER, UPPER:	0.	0.0
LOWER	0.	0.0
THE MEAN VALUE IS	0.	0.0

TOTAL BT FOR JU 66 IS 66
ISO. OF MONTH JU 66 IS 14
AVERAGE THERMOCLINE DATA FOLLOW

LATITUDE 41 NUMBER OF BT 12		
DISCONTINUITY LAYER, UPPER:	9.	15.0
LOWER	12.	10.9
THE MEAN VALUE IS	11.	12.9
LATITUDE 42 NUMBER OF BT 23		
DISCONTINUITY LAYER, UPPER:	10.	12.2
LOWER	19.	7.2
THE MEAN VALUE IS	14.	9.7
LATITUDE 43 NUMBER OF BT 8		
DISCONTINUITY LAYER, UPPER:	8.	6.4
LOWER	15.	5.0
THE MEAN VALUE IS	12.	5.7
LATITUDE 44 NUMBER OF BT 9		
DISCONTINUITY LAYER, UPPER:	8.	11.2
LOWER	17.	7.1
THE MEAN VALUE IS	12.	9.1
LATITUDE 45 NUMBER OF BT 0		
DISCONTINUITY LAYER, UPPER:	0.	0.0
LOWER	0.	0.0
THE MEAN VALUE IS	0.	0.0

Table C-8 (Continued)

TOTAL BT FOR JL 66 IS 0

TOTAL BT FOR SP 66 IS 18
ISO. OF MONTH SP 66 IS 6
AVERAGE THERMOCLINE DATA FOLLOW

LATITUDE 41 NUMBER OF BT 0		
DISCONTINUITY LAYER, UPPER:	0.	0.0
LOWER	0.	0.0
THE MEAN VALUE IS	0.	0.0
LATITUDE 42 NUMBER OF BT 7		
DISCONTINUITY LAYER, UPPER:	27.	16.2
LOWER	35.	7.6
THE MEAN VALUE IS	31.	11.9
LATITUDE 43 NUMBER OF BT 2		
DISCONTINUITY LAYER, UPPER:	21.	16.5
LOWER	25.	6.7
THE MEAN VALUE IS	23.	11.6
LATITUDE 44 NUMBER OF BT 3		
DISCONTINUITY LAYER, UPPER:	19.	16.9
LOWER	25.	6.0
THE MEAN VALUE IS	22.	11.4
LATITUDE 45 NUMBER OF BT 0		
DISCONTINUITY LAYER, UPPER:	0.	0.0
LOWER	0.	0.0
THE MEAN VALUE IS	0.	0.0

TOTAL BT FOR AU 66 IS 46
ISO. OF MONTH AU 66 IS 6
AVERAGE THERMOCLINE DATA FOLLOW

LATITUDE 41 NUMBER OF BT 2		
DISCONTINUITY LAYER, UPPER:	11.	21.1
LOWER	14.	14.7
THE MEAN VALUE IS	12.	17.9
LATITUDE 42 NUMBER OF BT 15		
DISCONTINUITY LAYER, UPPER:	15.	18.4
LOWER	21.	10.2
THE MEAN VALUE IS	18.	14.3
LATITUDE 43 NUMBER OF BT 0		
DISCONTINUITY LAYER, UPPER:	0.	0.0
LOWER	0.	0.0
THE MEAN VALUE IS	0.	0.0
LATITUDE 44 NUMBER OF BT 5		
DISCONTINUITY LAYER, UPPER:	17.	16.9
LOWER	23.	8.6
THE MEAN VALUE IS	20.	12.7
LATITUDE 45 NUMBER OF BT 18		
DISCONTINUITY LAYER, UPPER:	14.	15.6
LOWER	21.	8.8
THE MEAN VALUE IS	17.	12.2

TOTAL BT FOR OC 66 IS 173
ISO. OF MONTH OC 66 IS 50
AVERAGE THERMOCLINE DATA FOLLOW

LATITUDE 41 NUMBER OF BT 1		
DISCONTINUITY LAYER, UPPER:	27.	13.4
LOWER	30.	7.8
THE MEAN VALUE IS	28.	10.6
LATITUDE 42 NUMBER OF BT 58		
DISCONTINUITY LAYER, UPPER:	33.	11.2
LOWER	41.	5.5
THE MEAN VALUE IS	37.	8.3
LATITUDE 43 NUMBER OF BT 56		
DISCONTINUITY LAYER, UPPER:	32.	7.8
LOWER	43.	5.2
THE MEAN VALUE IS	38.	6.5
LATITUDE 44 NUMBER OF BT 8		
DISCONTINUITY LAYER, UPPER:	22.	10.6
LOWER	30.	6.7
THE MEAN VALUE IS	26.	8.6
LATITUDE 45 NUMBER OF BT 0		
DISCONTINUITY LAYER, UPPER:	0.	0.0
LOWER	0.	0.0
THE MEAN VALUE IS	0.	0.0

Table C-8 (Concluded)

TOTAL BT FOR NO 66 IS 27
ISO. OF MONTH NO 66 IS 11
AVERAGE THERMOCLINE DATA FOLLOW

LATITUDE 41 NUMBER OF BT 1		
DISCONTINUITY LAYER, UPPER:	22.	8.6
LOWER	27.	7.8
THE MEAN VALUE IS	24.	8.2
LATITUDE 42 NUMBER OF BT 10		
DISCONTINUITY LAYER, UPPER:	46.	9.1
LOWER	45.	5.8
THE MEAN VALUE IS	46.	7.5
LATITUDE 43 NUMBER OF BT 1		
DISCONTINUITY LAYER, UPPER:	75.	6.3
LOWER	95.	5.0
THE MEAN VALUE IS	85.	5.6
LATITUDE 44 NUMBER OF BT 4		
DISCONTINUITY LAYER, UPPER:	45.	7.0
LOWER	75.	5.3
THE MEAN VALUE IS	60.	6.2
LATITUDE 45 NUMBER OF BT 0		
DISCONTINUITY LAYER, UPPER:	0.	0.0
LOWER	0.	0.0
THE MEAN VALUE IS	0.	0.0

TOTAL BT FOR DC 66 IS 7
ISO. OF MONTH DC 66 IS 7

TOTAL BT FOR 19 66 IS 444
TOTAL ISOTHERMAL BT IS 189

Table C-9

TOTAL BT FOR JA 67 IS 1
ISO. OF MONTH JA 67 IS 1

TOTAL BT FOR MA 67 IS 6
ISO. OF MONTH MA 67 IS 6

TOTAL BT FOR MY 67 IS 57
ISO. OF MONTH MY 67 IS 38
AVERAGE THERMOCLINE DATA FOLLOW

LATITUDE 41 NUMBER OF BT 9		
DISCONTINUITY LAYER, UPPER:	8.	7.6
LOWER	13.	6.7
THE MEAN VALUE IS	11.	7.1
LATITUDE 42 NUMBER OF BT 5		
DISCONTINUITY LAYER, UPPER:	22.	7.2
LOWER	28.	6.2
THE MEAN VALUE IS	25.	6.7
LATITUDE 43 NUMBER OF BT 3		
DISCONTINUITY LAYER, UPPER:	5.	7.3
LOWER	10.	6.2
THE MEAN VALUE IS	8.	6.8
LATITUDE 44 NUMBER OF BT 2		
DISCONTINUITY LAYER, UPPER:	13.	6.2
LOWER	34.	4.8
THE MEAN VALUE IS	23.	5.5
LATITUDE 45 NUMBER OF BT 0		
DISCONTINUITY LAYER, UPPER:	0.	0.0
LOWER	0.	0.0
THE MEAN VALUE IS	0.	0.0

TOTAL BT FOR FE 67 IS 0

TOTAL BT FOR AP 67 IS 38
ISO. OF MONTH AP 67 IS 36
AVERAGE THERMOCLINE DATA FOLLOW

LATITUDE 41 NUMBER OF BT 0		
DISCONTINUITY LAYER, UPPER:	0.	0.0
LOWER	0.	0.0
THE MEAN VALUE IS	0.	0.0
LATITUDE 42 NUMBER OF BT 1		
DISCONTINUITY LAYER, UPPER:	5.	6.0
LOWER	7.	5.6
THE MEAN VALUE IS	6.	5.8
LATITUDE 43 NUMBER OF BT 1		
DISCONTINUITY LAYER, UPPER:	6.	7.9
LOWER	9.	7.3
THE MEAN VALUE IS	7.	7.6
LATITUDE 44 NUMBER OF BT 0		
DISCONTINUITY LAYER, UPPER:	0.	0.0
LOWER	0.	0.0
THE MEAN VALUE IS	0.	0.0
LATITUDE 45 NUMBER OF BT 0		
DISCONTINUITY LAYER, UPPER:	0.	0.0
LOWER	0.	0.0
THE MEAN VALUE IS	0.	0.0

BT 1671 IS AN ISOTHERMAL BT

TOTAL BT FOR JU 67 IS 63
ISO. OF MONTH JU 67 IS 14
AVERAGE THERMOCLINE DATA FOLLOW

LATITUDE 41 NUMBER OF BT 2		
DISCONTINUITY LAYER, UPPER:	6.	14.0
LOWER	10.	8.8
THE MEAN VALUE IS	8.	11.4
LATITUDE 42 NUMBER OF BT 27		
DISCONTINUITY LAYER, UPPER:	12.	8.4
LOWER	15.	6.6
THE MEAN VALUE IS	14.	7.5
LATITUDE 43 NUMBER OF BT 15		
DISCONTINUITY LAYER, UPPER:	10.	14.5
LOWER	11.	11.0
THE MEAN VALUE IS	11.	12.8
LATITUDE 44 NUMBER OF BT 3		
DISCONTINUITY LAYER, UPPER:	12.	7.8
LOWER	21.	6.1
THE MEAN VALUE IS	16.	6.9
LATITUDE 45 NUMBER OF BT 2		
DISCONTINUITY LAYER, UPPER:	10.	11.2
LOWER	13.	7.1
THE MEAN VALUE IS	11.	9.2

Table C-9 (Continued)

TOTAL BT FOR JL 67 IS 57		
ISO. OF MONTH JL 67 IS 8		
AVERAGE THERMOCLINE DATA FOLLOW		
LATITUDE 41 NUMBER OF BT 5		
DISCONTINUITY LAYER, UPPER:	10.	21.2
LOWER	12.	15.2
THE MEAN VALUE IS	11.	18.2
LATITUDE 42 NUMBER OF BT 22		
DISCONTINUITY LAYER, UPPER:	12.	17.7
LOWER	15.	10.2
THE MEAN VALUE IS	13.	13.9
LATITUDE 43 NUMBER OF BT 7		
DISCONTINUITY LAYER, UPPER:	11.	17.8
LOWER	15.	10.5
THE MEAN VALUE IS	13.	14.1
LATITUDE 44 NUMBER OF BT 6		
DISCONTINUITY LAYER, UPPER:	12.	14.8
LOWER	16.	8.4
THE MEAN VALUE IS	14.	11.6
LATITUDE 45 NUMBER OF BT 9		
DISCONTINUITY LAYER, UPPER:	10.	14.3
LOWER	16.	9.1
THE MEAN VALUE IS	13.	11.7

TOTAL BT FOR SP 67 IS 25		
ISO. OF MONTH SP 67 IS 1		
AVERAGE THERMOCLINE DATA FOLLOW		
LATITUDE 41 NUMBER OF BT 2		
DISCONTINUITY LAYER, UPPER:	18.	17.5
LOWER	22.	14.0
THE MEAN VALUE IS	20.	15.7
LATITUDE 42 NUMBER OF BT 11		
DISCONTINUITY LAYER, UPPER:	21.	16.5
LOWER	24.	9.2
THE MEAN VALUE IS	23.	12.9
LATITUDE 43 NUMBER OF BT 0		
DISCONTINUITY LAYER, UPPER:	0.	0.0
LOWER	0.	0.0
THE MEAN VALUE IS	0.	0.0
LATITUDE 44 NUMBER OF BT 9		
DISCONTINUITY LAYER, UPPER:	17.	13.4
LOWER	27.	6.4
THE MEAN VALUE IS	22.	9.9
LATITUDE 45 NUMBER OF BT 2		
DISCONTINUITY LAYER, UPPER:	21.	15.4
LOWER	30.	6.0
THE MEAN VALUE IS	25.	10.7

TOTAL BT FOR AU 67 IS 63		
ISO. OF MONTH AU 67 IS 8		
AVERAGE THERMOCLINE DATA FOLLOW		
LATITUDE 41 NUMBER OF BT 9		
DISCONTINUITY LAYER, UPPER:	13.	19.7
LOWER	14.	12.5
THE MEAN VALUE IS	13.	16.1
LATITUDE 42 NUMBER OF BT 8		
DISCONTINUITY LAYER, UPPER:	18.	20.8
LOWER	20.	11.1
THE MEAN VALUE IS	19.	16.0
LATITUDE 43 NUMBER OF BT 36		
DISCONTINUITY LAYER, UPPER:	14.	16.9
LOWER	19.	7.6
THE MEAN VALUE IS	17.	12.3
LATITUDE 44 NUMBER OF BT 2		
DISCONTINUITY LAYER, UPPER:	15.	17.0
LOWER	18.	11.4
THE MEAN VALUE IS	17.	14.2
LATITUDE 45 NUMBER OF BT 0		
DISCONTINUITY LAYER, UPPER:	0.	0.0
LOWER	0.	0.0
THE MEAN VALUE IS	0.	0.0

TOTAL BT FOR OC 67 IS 102		
ISO. OF MONTH OC 67 IS 45		
AVERAGE THERMOCLINE DATA FOLLOW		
LATITUDE 41 NUMBER OF BT 0		
DISCONTINUITY LAYER, UPPER:	0.	0.0
LOWER	0.	0.0
THE MEAN VALUE IS	0.	0.0
LATITUDE 42 NUMBER OF BT 27		
DISCONTINUITY LAYER, UPPER:	38.	11.4
LOWER	42.	6.0
THE MEAN VALUE IS	40.	8.7
LATITUDE 43 NUMBER OF BT 19		
DISCONTINUITY LAYER, UPPER:	36.	8.8
LOWER	49.	5.1
THE MEAN VALUE IS	42.	6.9
LATITUDE 44 NUMBER OF BT 7		
DISCONTINUITY LAYER, UPPER:	23.	11.0
LOWER	33.	6.5
THE MEAN VALUE IS	28.	8.8
LATITUDE 45 NUMBER OF BT 4		
DISCONTINUITY LAYER, UPPER:	20.	11.3
LOWER	34.	8.0
THE MEAN VALUE IS	27.	9.7

Table C-9 (Concluded)

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TOTAL BT FOR   NO.  67   IS     5
ISO. OF MONTH  NO   67   IS     2
AVERAGE THERMOCLINE DATA FOLLOW
LATITUDE 41  NUMBER OF BT     0
DISCONTINUITY LAYER, UPPER:      0.          0.0
                     LOWER       0.          0.0
               THE MEAN VALUE IS 0.          0.0

LATITUDE 42  NUMBER OF BT     2
DISCONTINUITY LAYER, UPPER:     30.          9.7
                     LOWER      39.          5.4
               THE MEAN VALUE IS 35.          7.6

LATITUDE 43  NUMBER OF BT     0
DISCONTINUITY LAYER, UPPER:      0.          0.0
                     LOWER       0.          0.0
               THE MEAN VALUE IS 0.          0.0

LATITUDE 44  NUMBER OF BT     0
DISCONTINUITY LAYER, UPPER:      0.          0.0
                     LOWER       0.          0.0
               THE MEAN VALUE IS 0.          0.0

LATITUDE 45  NUMBER OF BT     1
DISCONTINUITY LAYER, UPPER:     45.         10.7
                     LOWER      50.          6.7
               THE MEAN VALUE IS 47.          8.7
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TOTAL BT FOR   DC   67   IS     0
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TOTAL BT FOR 19 67  IS   417
TOTAL ISOTHERMAL BT IS 159
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